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THE *Blue Jay*

Vol. XXI, No. 1

SASKATOON, SASK.

March, 1963



Rock Sharp-tailed Grouse

Photo by Doug Gilroy

Published quarterly by
THE SASKATCHEWAN NATURAL HISTORY SOCIETY
REGINA, SASK.

BLUE JAY CHATTER

A significant step forward in natural history in the Prairie Provinces was taken during 1962 when the Natural History Society of Manitoba released its first Ornithological Section Newsletter. This is a nine page mimeographed bulletin containing reports of rare or unusual bird observations, migrant bird casualties at TV towers, hawk banding by the Hamerstoms at Big Point and results of the nest box project. Congratulations to the Manitoba Society and best wishes for their continued success. I hope that this ornithological newsletter is the beginning of a regular quarterly publication and that reports will soon come from other sections of the Society as well. I hope, too, that the Society whose main support now comes from Winnipeg can soon be extended to include all people in Manitoba who are interested in wildlife and its conservation.

The first newsletter makes no plea for membership and does not mention a subscription price, but I think that all those interested in a truly provincial organization in Manitoba should make inquiries of Harold V. Hosford, 4110 Roblin Blvd., Charleswood 20, Manitoba. Additional members throughout the province could help support such publications both by sharing costs and by contributing reports, for people living in the country are in a position to make worthwhile contributions in natural history. The **Blue Jay** welcomes material from Manitoba, but we realize that we cannot handle all the Manitoba reports that **should** be published. For the same reason, we feel that a similar development in Alberta would complement the **Blue Jay** rather than competing with it. Three provincial natural history societies working hand in hand could greatly strengthen the cause of natural history on the Prairies.

In Saskatchewan there is a move afoot to form a Saskatchewan Archaeological Society. The first newsletter has been distributed (February, 1963) and the interim committee is planning to hold an organizational meeting at the Saskatchewan Museum of Natural History, Regina, on Saturday, April 20, 1963, with sessions through the day. Officers will be elected at that time. If you are interested write to Bruce McCorquodale at the Museum for the newsletter and programme. The proposed yearly membership fee is one dollar.

There is a great need for more active workers in natural history. Some projects already under way offer examples of what might be done. In the Moose Jaw Natural History Society, for example, young people are being involved in the activities of the society in a way that teaches them to appreciate and understand wildlife. Another scheme that is beginning to do good work is our Prairie Nest Records Scheme to which we can contribute by reporting on the nesting of our native birds. These records are being filed systematically and are even now yielding valuable information. We must keep up the good work of sending in reports because it is the combined contributions of many observers over a considerable period of time that constitute the value of such a scheme.

Apart from these special projects, there is always another way to help the Society. We can find new members—are there people in your area who do not get the **Blue Jay**? Since the membership fee barely covers the cost of printing the magazine, you could help by sending a donation to the Treasurer. No donation is too small to help improve the **Blue Jay**.

There are two other ways in which you could help the Society. First you could contribute to the Research Grants Fund and encourage your people to do research in natural history. The awards for 1963 will be made at the June meeting. Second, you could contribute to our Special Conservation Fund which is to be used for the purchase of wetlands or other land needed by wildlife. We hope that our society can soon make a start in this field but we need your financial support. Research Fund and Conservation Fund donations are income tax deductible so please send instructions with your donations. Donations to special funds may be sent to the **Blue Jay** Editor, Box 1121, Regina.

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Largest Erratic in Saskatchewan ?

by W. O. Kupsch, University of Saskatchewan, Saskatoon

In the March, 1961, issue of the **Blue Jay** I requested information which would enable me to find out where the largest glacial erratic in Saskatchewan is located. The request was in the form of a contest and, first of all, I wish to thank all who participated. The promised glacial maps of Canada were sent out to those who called my attention to some genuine "whoppers". Thanks are also due to the Saskatchewan Research Council who defrayed part of the field trip expenses incurred by the writer when in search of the reported large erratics.

The following discussion of the results of the contest consists of some comments on the two largest erratics reported so far from the Interior Plains portion of Saskatchewan. Both are "free boulders" because they lie free on the land surface and are not enclosed in a matrix of till.

The **Little Manitou Lake Big Rock** is located at the west end of Little

Manitou Lake, Saskatchewan, in SW $\frac{1}{4}$ Sec. 17, T. 26, R. 32, W. 2nd Mer. It is a well-bedded and jointed block of dolomite having an angular box-like appearance and approximate dimensions of 34x22x13 feet (fig. 1). Its volume is therefore about 9724 cu. ft., and the estimated weight 750 tons (1 ton equals 2240 lbs.). The main block is surrounded by many smaller rectangular fragments clearly broken off along joints and bedding planes from the large erratic which lies in a shallow (approximately four feet deep) depression area in a glacial drainage channel, of which Little Manitou Lake is a part. The erratic is free because of water erosion which removed the surrounding finer material leaving a stony surface at the bottom of the channel. Water erosion may also account for the initial origin of the depression in which the erratic lies, but late loosening of the soil by hoofs of buffalo and cattle and subsequent



Photo by W. O. Kupsch

Fig. 1. Little Manitou Lake Big Rock. April, 1962.



Photo by W. O. Kupsch

Fig. 2. Aikto Erratic. April, 1962.

wind erosion could have deepened it even more.

The dolomite is light greyish yellow, mottled in places, finely grained and contains halysitid, favositid, and zaphrentid corals as well as gastropods, brachiopods, a few orthoconic nautiloids and **Receptaculites** sp. The lithology and fossils are typically those of the Red River dolomite of Middle (?) Ordovician age. The nearest outcrops of the Red River formation are in the vicinity of Balantyne Bay, Deschambault Lake, at a distance of approximately 210 miles to the north-northeast of Little Manitou Lake. Over this distance a vertical lift of 625 feet is indicated from an altitude of 1075 feet at Deschambault Lake to 1700 feet at the site of the Big Rock.

The **Aikto Erratic** is located $2\frac{1}{4}$ miles east-southeast of Aikto, Saskatchewan, in NE $\frac{1}{4}$ Sec. 34, T. 23, R. 4, W. 3rd. Mer. Dr. J. S. Scott of the Geological Survey of Canada, kindly supplied me with some of the following information on this erratic, which I visited and photographed in the spring of 1962 (fig. 2). The erratic is a uniformly fine-grained, light-

colored, reddish, granitic rock consisting mainly of plagioclase, potash feldspar, and quartz, with minor amounts of pyroxenes as the chief dark mineral constituents. The boulder measures approximately 30 x 20 x 8 feet, is well rounded and apparently semi-spheroidal in shape, although it is difficult to estimate how much of the erratic is below ground level. The surface of the boulder is smooth and in only one place have a few large fragments broken off from the main mass. The volume of about 4800 cu. ft. implies a weight of 370 tons. Like the Little Manitou Lake Big Rock, the Aikto Erratic lies in a depression, which is about three feet deep, located along the edge of a glacial drainage channel. Again, it is surmised that the boulder is free principally because water has eroded the surrounding till, which has been replaced by fine to medium-grained sand of stream origin.

The boulder near Aikto was apparently used in the past by Indians as a gathering place. Artifacts, such as various projectile points, are said to have been collected from the

ground surrounding it. Henry Youle Hind, one of the first geologists to visit the Saskatchewan prairies, showed the geographic position of the Aiktow Erratic on a map and described the boulder as follows in his report (1859. Northwest Territory. Reports of progress together with a preliminary and general report of the Assiniboine and Saskatchewan exploring expedition. Toronto, John Lovell, p. 57):

"About fourteen miles from the [South] Saskatchewan [River] there is a gigantic erratic of unfossiliferous [sic!] rock on the south side of the valley. It is seventy-nine feet in horizontal circumference, three feet from the ground; and a tape stretched across the exposed portion, from side to side, over the highest point, measured 46 feet. The Indians place on

it offerings to Manitou, and at the time of our visit it contained beads, bits of tobacco, fragments of cloth and other trifles."

As the Aiktow Erratic is located in the upper part of the Qu'Appelle Valley which will become flooded upon completion of the South Saskatchewan River Dam and because the boulder is of historic interest, moving the erratic to the high bank of the valley is contemplated. Although this is a herculean task for humans, the energy to be expended in this move is only an insignificant fraction of the work performed by the glacier which moved this piece of rock over a distance of at least 320 miles from the Precambrian Shield and from an original altitude of about 1250 feet to its present resting place at 1750 feet.

A Garganey duck in the Wild in Alberta

by Lawson G. Sugden, Can. Wildlife Service, Edmonton

An adult drake Garganey (*Anas querquedula*) was seen at a lake near Two Hills, Alberta, on June 22, 23, and 24, 1961. On the last day I was accompanied by Ronald H. Mackey, Canadian Wildlife Service, Edmonton. We observed the duck from about 100 yards through a 25-power telescope. It was observed standing on land, swimming and flying. Attempts to collect the bird were unsuccessful. It was in company with a flock of Blue-winged Teal (*A. discors*), predominantly males, which were very wild.

Delacour (*The Waterfowl of the World*, London, 1956, Vol. 2, p. 163) describes the male Garganey in breeding plumage as follows:

"... a black crown and throat, broad, long white supercilia joining on the nape, and the rest of the head and neck brownish chestnut streaked with white; mantle, black and tail blackish brown with pale borders to the feathers; wings generally as in other species of the group (blue-winged ducks), the long lanceolate, ornamental scapulars glossy black with a broad central white line, the wing coverts pale bluish grey, the mirror light between two wide white bands; breast light brown laced with black; rest of underparts white, finely waved with black on the sides and spotted on the vent and undertail coverts. Iris brown; bill and legs leaden grey."

The Garganey is similar in size to the Blue-winged Teal. The most dis-

tinctive features of the Two Hills' duck were the long white supercilia on the head and neck, the black lanceolate scapulars with central white line, the pale-bluish wing coverts, and the whitish underparts.

Previous to this time neither Mr. Mackay nor I had seen a Garganey. However, a month prior I had collected a strange-looking Blue-winged Teal drake which I thought might be some form of hybrid. It had the supercilia on the head and neck which joined the white crescent of the Blue-winged. This suggested a Garganey characteristic. Otherwise it resembled the Blue-winged. (According to Mr. W. Earl Godfrey, National Museum of Canada, it is a partial albino Blue-winged.) Consequently, I was familiar with the description and illustration of the Garganey in Delacour's book. In addition, we both reviewed this information prior to the last day's observation. There is no doubt in our minds about the identification. All observable details of the duck's appearance matched those given in the book.

Breeding range of the Garganey covers much of Europe and Asia from the British Isles to north-eastern Siberia. The species is not men-

tion in **The A.O.U. Check-list of North American Birds** (1957). Correspondence with zoos and avaries in western Canada indicate that it has not been kept in captivity here. However, it is apparently kept in some zoos in the western United States. The duck in

question may have escaped captivity and migrated north, possibly mated to a Blue-winged Teal. I favour that explanation for its presence in Alberta, rather than the possibility that it represents an erratic wanderer from its indigenous range.

Banded Ross' Goose Recovered in Regina

by Douglas E. Wade and Dorothy R. Wade, Regina

On December 5, 1962, Mrs. Wade saw a white goose on the open water of the Regina Waterfowl Park. On December 6, in company with Margaret Belcher and Robert Nero, we were unable to get a close enough view of this goose to determine whether it was a Snow Goose or a Ross' Goose. On December 9, we were able to see it at close range through 12X binoculars and saw there was no "grinning patch." On December 15, we were able again to get close to the bird and could see a metal band on its right leg and confirm the absence of a "grinning patch." The goose was seen subsequently by us on December 19 and 30. On all of these dates the bird appeared to be in excellent flying condition and was often seen in flights with Canada Geese and Mallards. It would land and take off with no apparent difficulty. It was an active feeder and was seen going through preening activities. It was also seen by George and Marjorie Ledingham, Vic Wilshire, Allan Smith and Alan Wade—the last three on the Christmas Count day (December 30). Fred Lahrman, of the Saskatchewan Museum of Natural History, had been able to see the goose and had determined it to be a Ross' Goose.

On January 5 and 6 we and two other groups were unable to spot the goose. Later, we learned that the Ross' Goose had been found dead on January 6 in one of the open-water channels across from the city power house by Ricky Sanderson. He turned the bird over to the Museum of Natural History to be prepared as a specimen. The Museum reported its weight as 2 lbs. 9½ oz. Ralph Carson of the Museum also reported that the carcass showed evidence of several shotgun pellets having recently pene-

trated the body. Presumably the bird had been shot at (illegally) when going to feed in grain stubble beyond the city limits. There was no evidence of lead shot in the gizzard, although some wheat grain remnants and quartz sand-size granules were found. The goose was a female.

Knowing that a number of Ross' geese had been banded in Saskatchewan, we got in touch with Mr. Alex Dzubin, wildlife biologist with the Canadian Wildlife Service in Saskatoon. In his letter of January 7 he wrote:

"The Ross' Goose No. 667-65331 which you observed in Regina and which was subsequently recovered has the following history. It was an adult female banded on September 30, 1962, at Buffalo Coulee, which is situated four miles north and four miles west of Colville, Saskatchewan, at 51°46'N. and 109°18'W. in the Kindersley District of west-central Saskatchewan. The bird was the last one banded of 141 Ross' caught by cannon net traps on that day. A crew made up of personnel of the Canadian Wildlife Service, Nebraska Game, Forestation and Parks Commission, U.S. Bureau of Sports Fisheries and Wildlife, and Colorado Game and Fish Department co-operated in the fall banding project at Kindersley.

"Total bandings of this species [in 1962] were 770. Last year's total was 442. Most Ross' winter in the Sacramento Valley of California; the few recoveries of 1961 birds are from this wintering area. No recoveries [except the Regina bird] of 1962 banded birds are available as yet but I have a half dozen sight recoveries of red and yellow dyed Ross' from Montana and central California."

Imperfect Albinism in a Green-winged Teal

by Robert W. Nero, Regina



—Govt. of Saskatchewan, Courtesy D. Wade.

The condition in which birds show a pale version of the normal appearance due to a general reduction of pigmentation over the entire plumage has been termed imperfect albinism or dilution. The accompanying photograph shows two immature female Green-winged Teal, both of which were taken while hunting on October 9, 1961, at Regina. The specimen on the left is in normal plumage, the one of the right shows the dilution effect. Pigment reduction is apparent in all parts of the plumage; instead of the normal blackish-brown color, the predominant color is pale grayish-brown. In a few areas of the plumage the reduction of pigment has resulted in an apparent change of color, e.g., from reddish-brown to tan on the tips of the secondary feather coverts, which form the margin of the speculum. Melanin, the chief pigment affected by albinism, produces various color effects from black to brown and reddish, depending upon the size and

concentration of granules. Note that the reduction of pigmentation has also involved the feet and the bill which are paler in color than in the normal. The eyes of the bird, however, were apparently not affected. A noticeable change not apparent from the photograph is the almost complete absence of iridescent color in the speculum. In the normal specimen the five innermost secondaries are bright greenish-blue, a color resulting mainly from mechanical diffraction of light; and these feathers are otherwise nearly black. In the aberrant specimen these feathers are brownish-black and a slight gloss with just a hint of green may be seen on a limited portion of each of the three innermost secondaries. This suggests, as might be expected, that the basic physical properties of the feathers have been unchanged except for the reduction of underlying pigment, and that the lack of iridescent green color is due to this reduction of black pigment.

The Fall Recoveries of Young Mallards Banded at Kindersley, Saskatchewan

by **J. B. Gollop**, Canadian Wildlife Service, Saskatoon

This article deals with the distribution in Canada and the United States of fall recoveries of mallards banded before they were old enough to fly in the vicinity of Kindersley, Saskatchewan. In order that the paper be no more complicated than necessary, it is based only on recoveries reported by hunters during the hunting season immediately following the summer of banding. Records for birds recovered in other ways and reports for subsequent years have not been used. Furthermore, although this project started in 1952 and ended in 1959, the present paper is based on the four years in which enough recoveries were reported to give reliable results for each year—1955 to 1958, inclusive. Therefore the paper is based on 1,104 recoveries distributed as follows: 1955, 184; 1956, 197; 1957, 384; 1958, 339.

Most of the personnel used in the banding phase of this project were employed by the Canadian Wildlife Service but other agencies contributed generously at various times—the Saskatchewan Wildlife Branch, Ducks Unlimited, the U.S. Fish and Wildlife Service and private citizens at Kindersley, particularly R. A. Lamont and M. W. Morgan. More than 1,000 hunters reported recoveries to the U.S. Fish and Wildlife Service Bird Banding Office which, in turn, forwarded their information to me.

The 13,264 young mallards banded during these four years were caught in a 2,900-square-mile block reaching from the South Saskatchewan River north for 70 miles and from the Saskatchewan-Alberta boundary east for 41 miles. Kerrobert is within the area near the northeast corner.

Two-thirds of the birds were caught by crews of two men and one dog; the remainder were herded into traps set on land by crews of five to seven men. Dogs were used regularly on the 100 to 150 ponds worked each year. A good day's banding for a dog-crew was 50 mallards; the highest catch for a single day was

123. Traps were used only occasionally because situations justifying them—large numbers of young on sloughs with no emergent plants such as sedges, rushes and smartweed—were few and far between. The largest number caught by trapping was 533 young mallards. Each of three other drives yielded more than 400, but as many ended with fewer than ten.

The following is a summary of information on hunters and hunting regulations during these years. The number of duck hunters in Alberta and Saskatchewan was probably less than 100,000. In the Pacific, Central and Mississippi Flyways of the United States the total number of active hunters alternated between 1.8 and 1.7 million. (The Atlantic Flyway and Mexico are omitted here because of the few recoveries from these areas.) The daily limit in Alberta remained at ten, in the Mississippi Flyway at four, and in the Central at five. In Saskatchewan the daily limit dropped from 15 to 11 after the first three years and in the Pacific Flyway from six in the first two years to five in the last two. In the northern parts of Saskatchewan and Alberta hunting seasons opened on September 1 or 2; in the south, on September 6 or 7, except in 1956 when it was September 12. In all years mallards left the Canadian prairies in November before hunting seasons legally closed. The earliest U.S. hunting seasons opened in October and the latest closed on January 15. Season lengths remained at 70 days in the Mississippi Flyway, went from 65 to 75 in the Central, and from 80 to 95 in the Pacific.

The average geographical distribution of the recoveries of the four years is presented in the accompanying map. The map indicates the percentage of recoveries reported from each province and state; for states on the boundary of the distribution, only that part in which the recoveries actually occurred is shaded.

As is readily apparent, mallards

raised at Kindersley showed little indication to travel as a group. During the September-to-January period they were found in two provinces, 33 states and Mexico. In as short a period as ten days in 1956 Kindersley mallards were taken at Reward, Saskatchewan, on November 11, in California on November 17, and in North Carolina on November 19. It is 2,070 miles between the Saskatchewan and Carolina recoveries and 2,500 miles between the two U.S. points. Four months earlier these three birds were being reared within 25 miles of each other.

Further evidence that birds of a feather do not flock together comes from an examination of recoveries from bandings on a single water area. We have 107 U.S. reports for young mallards banded in three years on the 100-acre slough just south of the town of Marengo. These birds spread themselves over 19 states, including California and North Carolina.

Considering all recoveries, 35 per cent were from Canada; in individual years this varied from 27 to 40 per cent. The remainder were from the United States (except for one report from Mexico). Half of the U.S. recoveries were from the Mississippi Flyway, 40 per cent from the Central, nine per cent from the Pacific, and less than one per cent from the Atlantic. Outside of Saskatchewan the major harvest of these young mallards occurred in Alberta, Montana, South Dakota, Nebraska, Iowa, Missouri, Arkansas, Louisiana and Texas. Next to Saskatchewan, the largest kill for any province or state was in Arkansas, mostly in the flooded oak flats around Stuttgart where millions of mallards regularly winter.

In Canada 36 of every 100 recoveries came from within 10 miles of the banding sloughs, these recoveries being reported almost every week of the season each year until freeze-up in November. Seventy of each 100 recoveries were within 50 miles, the remaining 30 being divided equally between Saskatchewan and Alberta. Each year some recoveries were made north of the banding sites and in 1958 one-fifth of the continental kill was reported from this direction. Many of these birds came from the

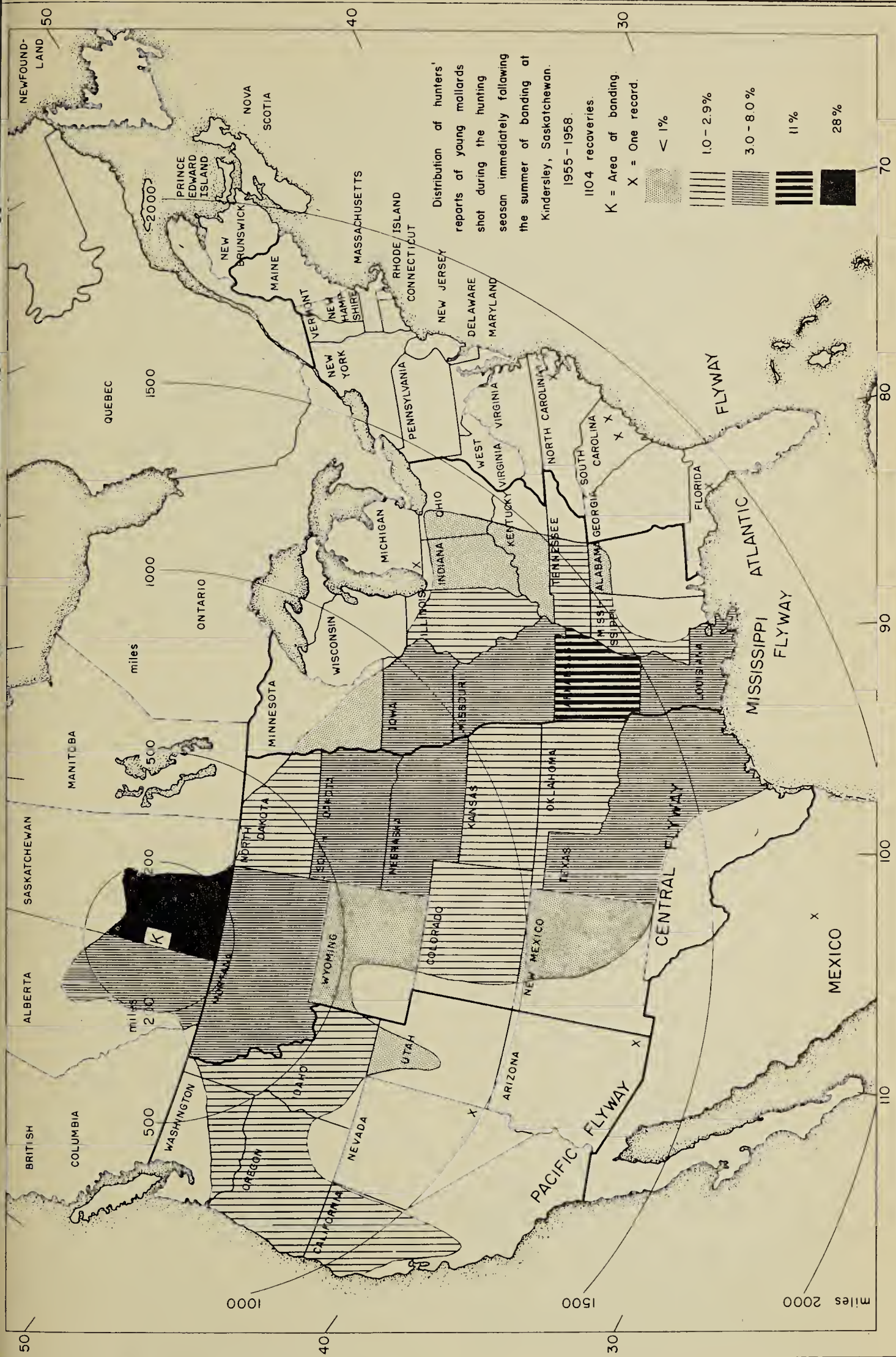
Beaverhill Lake area near Edmonton, Alberta; the farthest was from Barrhead, Alberta, 280 miles northwest of Kindersley.

In Saskatchewan most of the birds were recovered within the block of banding but a noticeable concentration of reports occurred in the Luskland-Wilkie-Macklin triangle. Banded mallards were shot as far north as Neilburg, North Battleford and Shellbrook, and as far east as Watrous, Imperial, Crane Valley and Coronach. Other points of recovery more than 50 miles from the banding sloughs were Antelope, Assiniboia, Climax, Cutknife, Darmody, Elbow, Golden Prairie, Gull Lake, Hodgeville, Instow, Kyle, Mankota, Maple Creek, Moose Jaw, Richard, Robsart, Rockhaven, Shaunavon, Swift Current and Waldeck.

It may be of interest to note that tourists reported 110 of the 299 recoveries made in Saskatchewan. U.S. hunters, coming from 13 states, reported 74, while hunters from Alberta, Ontario, British Columbia and Quebec reported 36. However, these figures do not necessarily mean that non-resident hunters took more than one-third of the Kindersley-raised mallards shot in Saskatchewan. It is quite possible that hunters who spend more money on their hunting are also more likely to report bands. If true, their percentage of the kill would be exaggerated.

On a monthly basis, the reported kill was distributed approximately as follows: nine per cent in September, 23 per cent in October, 41 per cent in November, 20 per cent in December and eight per cent in January. The small September kill may be surprising, since young ducks probably are less wary and are weaker flyers at the start of the four-month hunting period than later. Part of the reason is that hunting was legal only in Canada during this period. It may also be that hunters in western Saskatchewan and eastern Alberta concentrated on shooting geese at that time.

Major differences occurred in the timing and geographical distribution of the kill in different years. As might be expected, if a high kill occurred during the first half of the season it occurred in the northern



part of the continent. If the harvest was high late in the season, it was concentrated in the south. This situation is indicated in the following table:

Per Cent of Total Recoveries				
	1955	1957	1958	1956
By November 10	60	50	43	31
Within 800 miles of Kindersley	60	58	46	38

This difference in geographical distribution is also illustrated when only the Central and Mississippi Flyways are considered for 1955 and 1956:

	1955	1956
North (Montana, Wyoming, North and South Dakota, Minnesota, Iowa)	40%	9%
Middle (Colorado, Nebraska, Kansas, Missouri, Illinois, Indiana, Ohio, Tennessee, Kentucky)	39%	37%
South (New Mexico, Texas, Oklahoma, Louisiana, Arkansas, Mississippi, Alabama)	21%	54%
	100%	100%

In conclusion it should be emphasized that figures and statements throughout this paper refer to the distribution of recoveries reported by hunters. This is not the same thing as distribution of the actual kill. There are at least two factors complicating the relationship between reported kill and actual kill of banded birds. If a hunter shoots a banded bird but does not recover it, he cannot report it. Studies have shown that crippling losses vary in different areas and, therefore, reporting rates will vary from one area to another for this reason. The second factor is local publicity encouraging the reporting of bands. More bands are likely to be reported where this occurs than from other areas. Information from special studies indicates that because of the particular distribution of this group of recoveries the difference between reported and harvested Kindersley-banded mallards may not be too different on a flyway basis.

However, once this relationship has been established, an important objective is still another step away. Distribution of the harvested segment of the population may not be the same as distribution of the overall population. The main problem here is that different proportions of a population may be harvested in a

given year in different areas or in the same area in different years. For instance, consider the case where hunting conditions are such that 20 per cent of Kindersley mallards in the Central Flyway but only 10 per cent in the Mississippi Flyway were shot. Banding would then show twice as many recoveries in the western flyway as in the eastern if there were actually the same number of birds in each flyway. If there were twice as many birds in the Mississippi Flyway, band recoveries would be equal from each area. A person assuming that the proportions killed were the same would make a significant error in accepting the band recovery data at face value. This problem has not been solved.

To summarize: This paper deals with the geographical and seasonal distributions of the first-year band recoveries of Kindersley-raised mallards as reported by hunters. The geographical distribution of the reported recoveries may not be too different from the geographical distribution of the actual harvest of these birds. However its relationship to the distribution of the Kindersley-raised mallard population as a whole is not known at present and cannot be determined from banding data alone.

S. N. H. S. NEWSLETTER

The S.N.H.S. has for the first time put out a newsletter as a supplementary means of keeping members better informed about the various activities of the Society. It is hoped that this will provide a broader and more regular communication between members and our executive. Frequently in the past, through lack of space, we have had to set aside letters and comments which might have been of interest to the readers; through the newsletter it will now be possible to publish more of these items. Members and executive are urged to send newsworthy comments and notes to the Newsletter Editor, Box 1121, Regina.—Ed.

Whooping Crane Winter Count, 1962-63

by Fred G. Bard, Saskatchewan Museum of Natural History

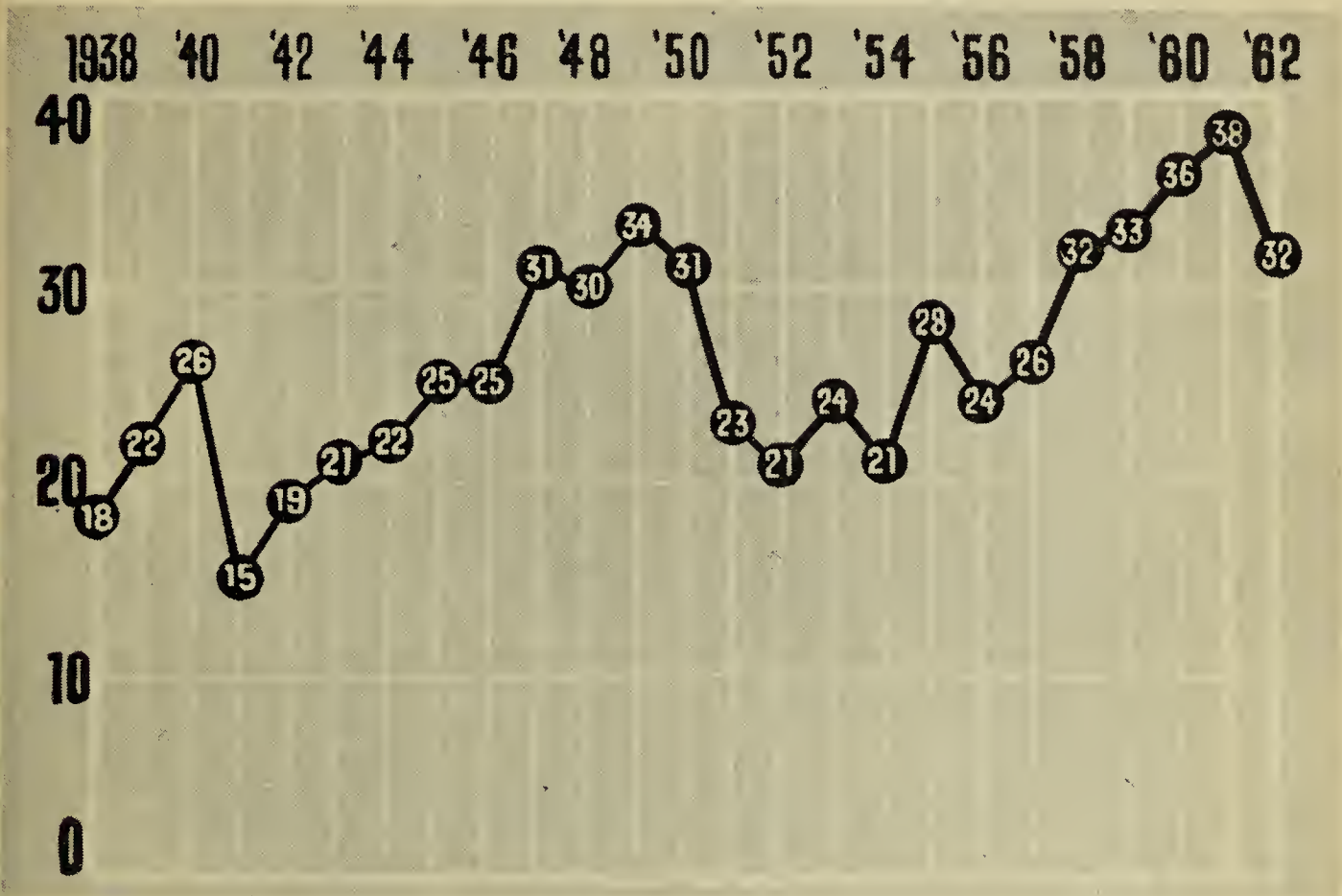


Fig. 1. Wintering population of Whooping Cranes at Aransas, 1938-1962.

The news of the loss of six Whooping Cranes that failed to arrive in the Aransas National Wildlife Refuge is disconcerting. It may never be known what happened to these birds. One report attributed the losses to American hunters shooting Sandhill Cranes. I understand, however, that areas opened to hunting Sandhill Cranes were not frequented by Whooping Cranes. This year's experience indicates how little we know about crane losses and how difficult it is to prevent them.

From statistics gathered (we stand to be corrected) we submit two charts. One covers the wintering population in the Aransas Refuge from 1938 to 1962 (fig. 1); the other shows the six years of greatest losses since 1940 (fig. 2). Many of us feel that the captive birds in New Orleans offer the opportunity for building up the Whooping Crane population, but the birds and George Douglas need more than good wishes.

The Whooping Cranes wintering at Aransas are an inspiring sight, how can these birds succeed in maintaining or increasing their numbers on their own in the face of changing

land use, the draining of wetlands, development pressures, increased hunting and the expanding use of chemicals? These are dangers that threaten the cranes all the way from Wood Buffalo National Park to the Aransas National Wildlife Refuge—a distance of about 2,500 miles.

The Whooping Crane is not just another bird—it has become a symbol illustrating how little we really care about our wildlife inheritance. Through our indifference we can easily be responsible for the loss of another species. We should accept the challenge and get together to help avert this tragedy.

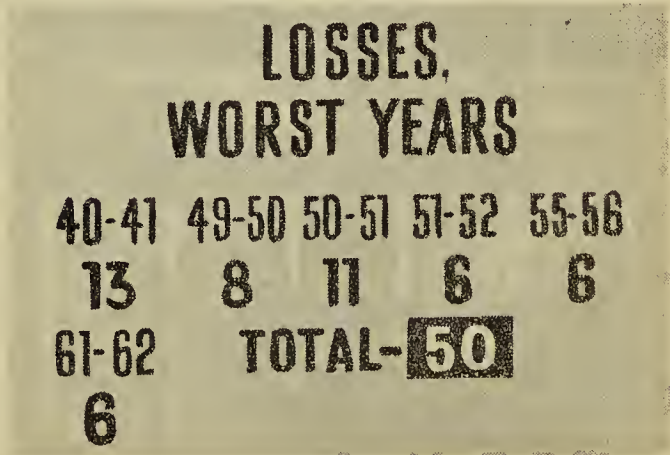


Fig. 2. Years of heaviest losses, 1940-1962.

Some 1962 Bird Records for the Saskatoon District

by J. B. Gollop, J. F. Roy and R. V. Folker

The following is a list of unusual observations of birds made during 1962 in the Saskatoon district. This is a 3,600 square mile block which includes Townships 31 to 40, Ranges 1 through 10, West of the Third Meridian. Towns near the north, east, south and west boundaries are, respectively, Radisson, Elstow, Hanley and Kinley. Observations were recorded by one or more of the authors unless otherwise noted.

Seven species were recorded for the first time, at least within the last five years:

VIRGINIA RAIL: One young was observed for several minutes at Moon Lake on August 18.

KNOT: One fed with a flock of Sand-
erlings and Stilt Sandpipers at Rice
Lake on May 26.

HUDSONIAN GODWIT: Two of the
authors and W. G. Richards found
three of these birds on a shallow
slough about 20 miles northwest of
Saskatoon on May 6.

LONG-EARED OWL: One spent at
least ten hours on November 6 in the
yard of H. W. Wickenden, Saskatoon.

YELLOW-BELLIED FLYCATCHER:
One was picked up August 31 at the
CFQC-TV tower. It was probably
killed on the night of August 29-30.

GRAY-CROWNED ROSY FINCH: On
October 20, one landed on a tele-
phone wire within the city and was
observed for several minutes.

LE CONTE'S SPARROW: At least
one was seen and heard on July 5
near the Saskatoon airport. On Aug-
ust 18 at least two were seen four
miles northeast of the city.

Unusually large late summer and
fall concentrations of at least eight
species were recorded this year. The
following were the largest flocks or
roosts noted in the Saskatoon district
during the last half of 1962:

MOURNING DOVE: 90 ± August 15,
8 miles south of Saskatoon.

EASTERN KINGBIRD: 75 + August
22, Borden Bridge.

COMMON CROW: 25,300 ± Septem-
ber 21, Beaver Creek.

ROBIN: 1,235 + October 6, Moon
Lake.

MOUNTAIN BLUEBIRD: 65 + Aug-
ust 19, 5 miles south of Saskatoon.

WESTERN MEADOWLARK: 47 + ,
September 22, Rice Lake.

The Mourning Doves were around
a dugout and dry slough in a pasture;
the kingbirds were in trees along the
the south side of North Saskatchewan
River in a strip 50 by 150 yards. The
crows and robins each used 15-20
acre roosts. In the case of the crows,
the roost was the same as in 1961,
when a maximum of possibly 70,000
birds used the site at one time. The
meadowlarks concentrated in ap-
proximately three acres of pasture
while the bluebirds were feeding in
five acres of summerfallow and
trees.

SPARROW HAWK: On September 3,
two of the authors on opposite sides
of the South Saskatchewan recorded
at least 192 Sparrow Hawks. More
than 75 were observed in summer-
fallow and stubble along a one-mile
stretch of road between Pike Lake
and the river. Across the river 84
birds were noted, most of them along
five miles of road north and south of
the concentration on the other side.

BLACK-BILLED MAGPIE: Flocks of
more than 50 birds were unusual in
this area in previous years. How-
ever, in 1962, the following were re-
ported: August 10, 62; August 12,
95 + ; August 13, 525 ± ; August 18,
256; August 25, 441; September 12,
55 + . These flocks were in weed-
grown summerfallow, pasture and
stubble.

The following observations may
also be of interest:

RED-NECKED GREBE: This species
has been thought to be a transient in
this district, but two adults were seen
feeding three young, two-thirds
grown, on Pike Lake, July 28.

HAWKS: Larger numbers than usual
were seen in migration. The greatest

numbers in spring were on April 6, 7 and 8, when 108, 44 and 68 were noted, many over the city of Saskatoon itself. The highest rate was 64 in one hour near Moon Lake on April 6. Buteos and Marsh Hawks made up the major parts of the flights.

Exactly six months later, on October 6, Michael Gollop counted 121 hawks from his back yard in Saskatoon in four hours, while 69 buteos and accipiters were recorded east of the city during the same period. The following day 95 buteos, mainly Rough-legged Hawks, were seen in the same length of time, and on October 8, 36 buteos and Marsh Hawks were recorded in five hours. Hawks moving in smaller numbers were seen both before and after these dates.

SANDHILL CRANE: This is the first year that cranes have been noted throughout the summer in this district. Six on June 9 near St. Denis was the smallest number recorded for each month from April 14 to October 21.

SHORT-EARED OWL: Only one record for the entire year: September 29, one at Moon Lake.

YELLOW-SHAFTED FLICKER: J. D. Hogg had one bird in his yard in Saskatoon during January and February. One was reported regularly in the city until December 24 by Dr. and Mrs. J. M. Pepper and G. Michalenko. Mr. J. D. Hogg and Miss N. P. Cordery saw two at Beaver Creek on December 26.

HORNED LARK: On December 29 half way between St. Denis and Vonda two were seen together. On December 31, 48 were noted in one flock between Delisle and Asquith.

THRUSHES: At 2 a.m. on September 2 a particularly heavy migration of unidentified birds was in progress. Short, lilting, one-syllable notes were heard continuously for fifteen minutes. The effect was like an eastern marsh full of spring peepers. It was raining heavily at the time, the rain having started about 9 p.m., September 1, and continuing until 8 a.m., September 2. Because of poor roads, the CFQC-TV tower, eleven miles east of the point that the migrating birds were noted, was not checked that morning. Very few

birds were heard migrating early in the evening of September 2. A check of the TV tower on September 3 yielded 37 birds—the highest kill ever reported at this structure. All of the birds found had apparently been killed during the night of September 1-2. Twenty (plus one live, injured bird) were Swainson's Thrushes and two were Gray-cheeked Thrushes, the remainder being warblers and vireos. This might be interpreted as an indication that most of the calls heard during the rain were thrushes. On the other hand, H. L. Stoddart (1962. Bird casualties at a Leon County, Florida TV tower, 1955-61. Bull. No. 1. Tall Timbers Research Station, Tallahassee, Florida), based on almost daily year-round checks of a Florida TV tower for more than five years, states that "heavy showers during the early night apparently ground the majority of vireos, warblers, and thrushes, and other passerines with the exceptions of the finch tribe".

CEDAR WAXWING: Once regarded as a summer resident, this species has now been recorded on four of the last eight Christmas bird counts. Twenty were seen on December 26.

COMMON GRACKLE: Two wintering at Wickendens' in the city were recorded on the Christmas bird count.

WHITE - THROATED SPARROW: Harold Belcher recorded the first summer occurrence of this species when he heard and saw a single bird at Maple Grove on July 6 and 13.

Back Copies of the Blue Jay

With the printing of the **Blue Jay Index**, 1942-1960 (available from the Treasurer, Box 1121, Regina, for \$2.00) there has been an increased demand for back copies of the **Blue Jay**. Volumes 1-4 inclusive and volumes 9, 10 and 11 are almost completely out of print, but the society has a limited number of all other volumes which can be sold at one dollar per volume. If you are a recent member why not build up your library by buying the **Blue Jay** and the **Index**. If you know of extra copies of the rare issues mentioned above please send word to the Treasurer, Box 1121, Regina.

MOCKINGBIRD AT P.A.

by **Auguste Viala**, Prince Albert

On October 5, 1962, a Mockingbird appeared on my property in Prince Albert and I observed it several times during the next ten days. Then it disappeared and I did not see it until it returned on November 14 and 15. Its next appearance was on December 6, following which it followed the pattern of disappearing for a few days and then returning. Until the 29th of December (date last seen) it continued to visit my feeding station in the back yard. It would perch for long periods on a branch or even on an apple box I have placed on the south side of my house six feet from the ground. On December 29, for example, it remained from 10:45 a.m. to 4:00 p.m. perched on a honeysuckle.

The weather until the end of the year was mild, with only a light snow cover. After the snow had covered the ground the Mockingbird fed on honeysuckle or mountain ash berries and at my feeder. I put out mostly bread, but it ate raisins, mashed hard boiled eggs, etc.

[ED. NOTE: There is no record for the Mockingbird in the Prince Albert area in Houston and Street's **The Birds of the Saskatchewan River, Carlton to Cumberland**, Spec. Publ. No. 2, S.N.H.S., 1959. As far as we know, this is the most northern record for this species in N. America.]

BARRED OWL RECORD AT DORE LAKE

by **Robert V. Folker**, Saskatoon

This owl was heard hooting on September 27, 1962. At the time, I was operating a checking station situated along the Dore Lake road where it crosses Rat Creek (Sec. 9—Twp. 61—Rge. 10—W3rd).

The call of the Barred Owl is quite familiar to me, having heard it several times in New York State and once while on vacation in Florida. This was a typical call, a series of distinct hoots, the last composed of two notes with a rising inflection on the second note. I answered this owl and, although the "talk" went back and forth for some time, was unable to entice it close enough for observation.

To date, Saskatchewan Barred Owl reports have been restricted to

the east side of the province. The most recent record was of a pair nesting in the Porcupine Forest Reserve north of Kelvington recorded by Houston (**Blue Jay**, 19:114-115). Other records have come from the Cumberland House region. Al Oeming (**Blue Jay**, 15:153-154) has reported ample evidence of this owl's occurrence in Alberta, so it was to be expected that the Barred Owl would one day turn up in western Saskatchewan.

HAWK OWL COLLECTED AT RAYMORE, SASK.

by **James Luthi**, Punnichy

On January 8, 1963, I saw what I believed to be a Hawk Owl four miles west of Raymore, Saskatchewan. The owl flew to a power line and settled on the wire about 75 yards from me. I collected the owl to mount as a specimen for my little museum.

[ED. NOTE: Apparently there has been an unusual southward movement of Hawk Owls this year—Edwin C. Weiland of Marquette, Michigan, collecting data on Hawk Owls and Snowy Owls, had 22 reports of the Hawk Owl for Upper Michigan and 8 reports for N. Minnesota by January 3, 1963.]

GREATER PRAIRIE CHICKEN AT SIMPSON, SASK.

by **James Luthi**, Punnichy

One Greater Prairie Chicken (Pinnated Grouse) was seen on May 12, 1962, about eight miles west of the junction of Highways #2 and #15 north of Simpson, Sask.

[ED. NOTE: This report of the Greater Prairie Chicken is of interest since the last record we have for the area is the specimen taken east of Simpson by F. G. Bard, on October 24, 1940. In the 1930's the area north of Last Mountain Lake was one of the areas most frequently reporting the Greater Prairie Chicken, but in recent years the question has been raised of whether the Greater Prairie Chicken has actually disappeared from all Saskatchewan. We think the number of reports justifies the belief that this grouse may still be present in certain areas. An attempt to review the current status of this species in Saskatchewan was made in the **Blue Jay**, 19:76-77, June, 1961.]

SUMMER RECORD OF EVENING GROSBEAK AT DENARE BEACH, SASK.

by Dorothy R. Wade and Douglas E. Wade, Regina

On July 3, 1960, about 10 miles south of Denare Beach, Saskatchewan, on the road (Saskatchewan Highway No. 35) to the Sturgeon-Weir River, we saw a pair of Evening Grosbeaks fly across the road. The light was excellent and we had a very good view. We have seen many hundreds of Evening Grosbeaks over 15 years in the eastern United States and have searched for evidence of their nesting in northern Minnesota.

The Denare Beach location is adjacent to Amisk Lake, some 24 miles southwest of Flin Flon, Manitoba. White spruce predominates in the vicinity where we saw the birds. Although our evidence is insufficient, we feel it will not be too long before some one establishes a nesting record for the Evening Grosbeak in

the Amisk Lake area or along the Hanson Lake Road farther to the north.

Evidence of breeding for this grosbeak is offered for Nipawin (about 95 miles southwest of Denare Beach) by Maurice G. Street who states: "On July 23, 1957, at the writer's back door, a pair fed berries from a red elderberry bush to a young bird barely able to fly. An immature male, still attended by its parents, was banded by the writer on August 25, 1956" (in Houston and Street, *The Birds of the Saskatchewan River, Carlton to Cumberland*, Spec. Publ. No. 2, S.N.H.S., 1959).

The Evening Grosbeak is reported in many Christmas counts throughout the province, including records for Nipawin and Torch River.

INTERESTING 1962 NESTING RECORDS AT OAK LAKE, MAN.

by David Hatch, Oak Lake, Manitoba

For most species, the 1962 nesting season commenced late and continued later than usual. It was June 3 before I found young Mourning Doves out of the egg, and as late as September 8 a Mourning Dove nest containing young could be observed here. Late nesting of Barn Swallows was also common and nearly every farm still had a nest of young Barn Swallows on September 15.

On May 17, 1962, I investigated a nesting report of a "little owl with horns" and to my amazement found a pair of Long-eared Owls nesting in an old Black-billed Magpie nest only 12 feet above the ground in a willow. The adult was so tame I had to shake the tree to get the old bird off the nest. The entrance hole was twice the normal size used by magpies and the nest contained four eggs. On a second visit made on May 27, none of the eggs had as yet hatched, but four fairly uniform downy young were found on June 13. The nest was visited a fourth and last time on June 20 when the young were banded.

This was the first Long-eared Owl nest I had ever seen and the first Long-eared Owls I had ever banded. The nest was only one-half mile west of the town of Oak Lake, Manitoba,

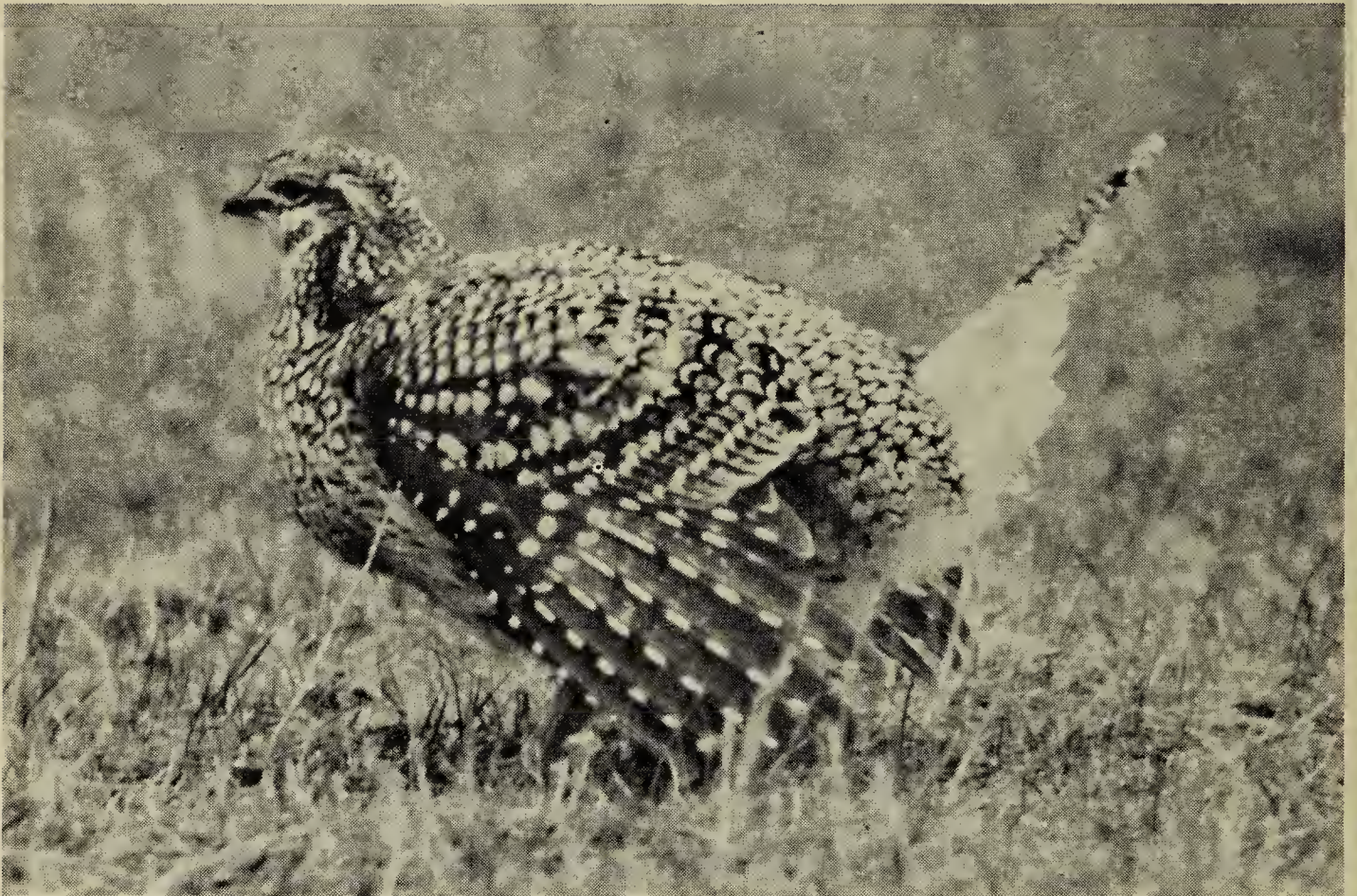
and was located on the farm of Mr. Jack McLeish in a poplar and willow bluff in a small gully. The land in the immediate vicinity was more than 50 per cent wooded.

An Eastern Kingbird nest, containing four eggs and found on July 7, proved very interesting. The nest was visited frequently to learn when the first young hatched. For one complete month after I found the nest, the female incubated the eggs. By August 7, I could advance to within two feet of the nest without the female flushing from the eggs. A visit on August 10 showed the female had finally ceased incubation and had deserted the nest, although she was still remaining within 50 yards of it. It took roughly one more week before the pair departed from the territory immediately encircling the nest. I examined the eggs and they proved to be infertile. The female incubated the eggs for a month after I discovered the nest and I have no idea how long she had been on the nest previous to July 7.

(ED. NOTE: The possibility that such infertility was due to concentration of chemical pesticides is suggested by recent studies of infertile eggs of the Bald Eagle. Wherever eggs can be examined, it would be interesting to know whether the presence of these chemicals could be established.)

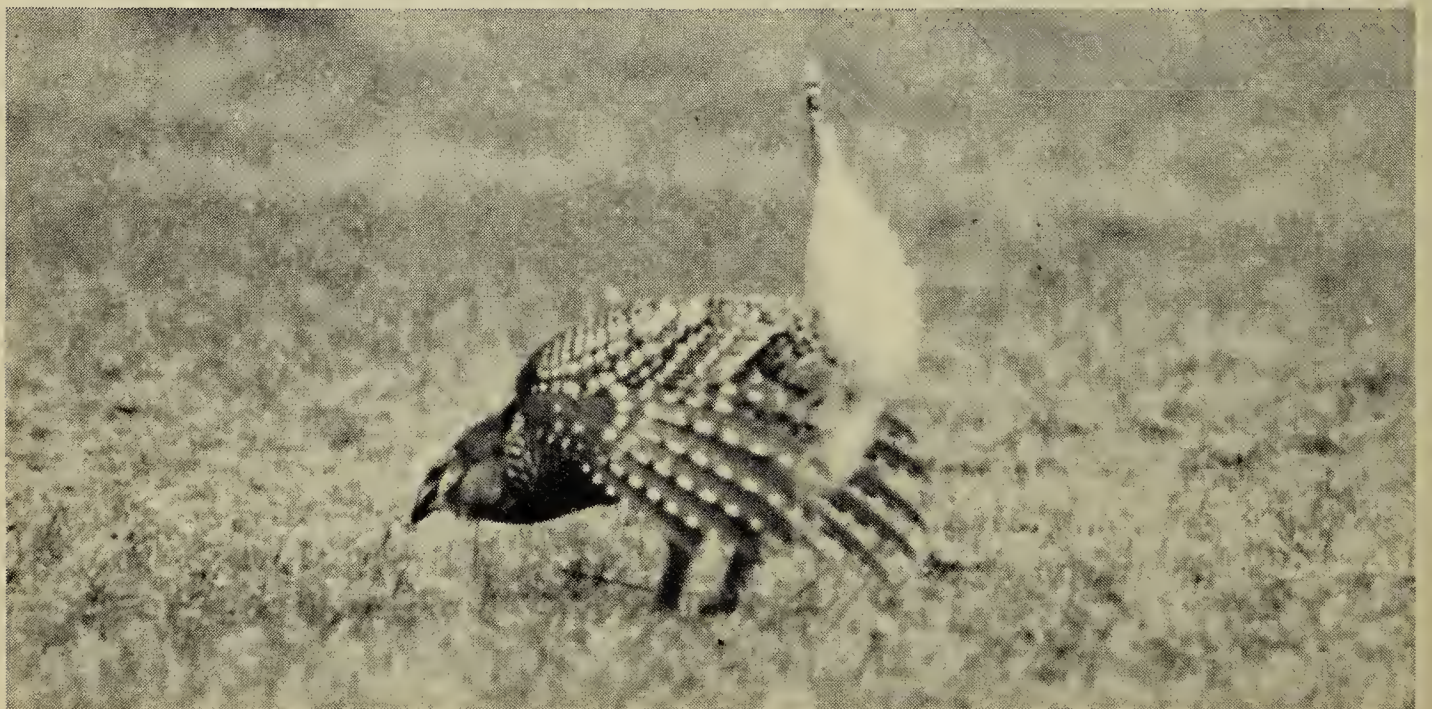
The Dance of the Sharp-tailed Grouse

by Doug Gilroy, Regina



The age-old dance of the Sharp-tailed Grouse is one of the most stirring events of the prairie spring. On the remote piece of prairie where these pictures were taken 100 birds gathered an hour before daylight to perform their dancing ritual.

Only the cocks dance. The bird on the cover has been resting a few minutes and is now getting ready to dance again. In the picture above he is rapidly coming into the dancing pose, head extending forward, wings drooping and tail raised. In the picture below we see the cock in typical dancing pose. The purple air sacs on the side of his neck are extended, and with feet that stamp so fast they are only a blur, he glides about like a mechanical toy.





Each bird has a partner (as seen in the above picture) and they bow and gyrate around each other with all the vigour of human jitter bugs. In the last photo a round of the dance is about to conclude. Each bows politely to his partner; then, still facing each other, they simply go into a squat, in which position they rest a few minutes. Suddenly as if a signal has been given, all leap to their feet and the dancing begins all over again. With 100 pairs of feet going at once, the ground fairly rattles.

As the sun slowly rises over the eastern horizon the fever of the dance stops almost immediately. A few die-hards may keep going, but the dance is really finished for another day.



First Report on Saskatchewan Falconry Association Banding Program

by Glen A. Fox, Kindersley

It would seem appropriate, after pleas for assistance and co-operation in our banding program, that the Saskatchewan Falconry Association should publish a preliminary report.

The author has been banding for the Association since 1960. During 1960 I banded on a sub-permit under Dr. Stuart Houston. In 1961 I was granted a permit of my own. In 1962 Spencer G. Sealy was also granted a permit, and rather late in the season, three other members of the Association were granted sub-permits under me.

As you well know, raptors do not nest in large numbers in easily accessible places, but rather in varied habitats over a vast area, different parts of which vary in accessibility. Many hours have been spent in the field searching for nests and in the banding of nestlings as well as in efforts to road-trap adults. I feel that 7,000 miles is a conservative estimate of the Association's travels, the expenses of which have all been defrayed by the members. Rain and the resulting mud have caused many memorable but grueling experiences. However, it is our feeling that the results have certainly justified the effort, and will continue to do so.

Our field methods are improving constantly. We are perfecting new trapping techniques. An elaborate filing system has been established which will contain detailed reports on each nest and each adult bird banded, and any other notes on raptors observed in the field. These

records will be used, when sufficient are available for a significant sample, in studies of all aspects of the life history of the raptors. We now collect blood samples from all individuals for virus and disease studies being carried out by Dr. R. Connell of the Veterinary Science Dept. of the University of Saskatchewan, Saskatoon.

Below is a list of all bandings carried out under my supervision as director of the banding program. Banding under the supervision of the Saskatchewan Museum of Natural History is not included. Snowy Owl bandings will be reported elsewhere.

Species	No. of Young	No. of Adult
Red-tailed Hawk	29	0
Swainson's Hawk	7	1
Ferruginous Hawk	6	0
Golden Eagle	1	0
Marsh Hawk	43	0
Prairie Falcon	12	1
Peregrine Falcon	0	2
Merlin (Pigeon Hawk)	12	0
Kestrel (Sparrow Hawk)	5	4
Great Horned Owl	39	0
Burrowing Owl	2	0
Long-eared Owl	12	1
11 Species . . . 168 young + 9 adults		
= 177 Raptors		

Grateful acknowledgment is made to the following: Canadian Wildlife Service, Sask. Dept. of Natural Resources, Dr. Stuart Houston, Spencer G. Sealy, Gary Anweiler, and all members of the S.N.H.S. who have supported us and all members of the Saskatchewan Falconry Association who have given of their time and talents in the field to make this project possible.

Fifth Annual Report of the Prairie Nest Records Scheme

by Elmer L. Fox, Regina

Statistics compiled for our five years of operation reveal that well over 5,000 cards have been turned in recording breeding information on 208 species of birds in the Prairie Provinces and the territory to the north. In 1962, 28 contributors for-

warded 561 cards on 129 species. Relatively speaking, the number of cards submitted was rather small. A number of our regular contributors have so far (January 15) not sent in their returns. We earnestly request that they do so immediately as the

information they contain is important.

The returns for 1962 were remarkable in many respects. Evidence of breeding for ten new species was recorded. W. H. Burns of Leduc, Alberta, added six new species to the list: he submitted information on over 50 nests. Of particular interest to Saskatchewan readers is his report from Alberta of the nest of the Townsend's Solitaire. This fascinating bird haunts Saskatchewan observers by its infrequent and unexpected appearances.

Jack Lane of Brandon submitted a number of excellent cards with information on incubation periods on a number of species. Undoubtedly the highlight of his year is the observations he made on the nesting of the Yellow Rail. Three nests of this species were located and observations made on one nest from the laying of the first egg until the nest was vacated by the downy young. Lane noted the incubation period of the Yellow Rail as 13 days plus a few hours. A significant contribution indeed. The complete report appears in his article "Nesting of the Yellow Rail in Southwestern Manitoba" in the **Canadian Field-Naturalist**, 76: 189-191, Oct.-Dec., 1962.

G. J. Smith of Winnipeg submitted a number of excellent cards including observations of the nesting of the Grasshopper Sparrow: another first for the Prairie Nest Records Scheme.

Speaking of firsts, almost everything Ernie Kuyt records is new. To date he has submitted reports on 42 species nesting in the Northwest Territories. He is a biologist with the Canadian Wildlife Service. With headquarters at Yellow Knife and working in the Thelon area, he has recorded nesting of such species as Willow Ptarmigan, Oldsquaw, Arctic Tern, and Harris' Sparrow. His cards are sprinkled with bits of information such as "the Tree Sparrow's nest is frequently heavily lined with ptarmigan down and muskox wool."

I was fortunate to observe two bobtail Dipper chicks begging food from their mother and to observe the first Saskatchewan Sandhill Crane nest reported to the Prairie Nest Records Scheme. The Dipper observations were made in Alberta; the crane nest north of Prince Albert. I am sure that the Sandhill Crane nests

in Saskatchewan every year, but it had not previously been reported to the Nest Records Scheme. This is only one of the number of relatively common birds that are presumed or known to nest in the area covered by the Scheme, but for which our files have no records. This list includes such species as the Gray Jay, the Olive-sided Flycatcher, the Caspian Tern, and the Common Merganser. Nest-records for Saskatchewan for the Green-winged Teal and the Ruby-throated Hummingbird have not yet been submitted to this Scheme. Yet, we all know they do nest here. The point I am trying to make is that it is just as important to record information on the common nester as it is to report on the rare or unusual. The recording of information is more important than we often think. In a few years, memories dim and the information is lost forever. Filling out a nest record card takes only a minute or two. The information on the card is valuable and is always available. The records are filed in the Saskatchewan Museum of Natural History, and are available to any responsible person.

The 1963 nesting season is rapidly approaching. You are encouraged to observe and record your observations on birds nesting in your area. Nest record cards may be obtained by writing to the **Prairie Nest Records Scheme, c/o The Saskatchewan Museum of Natural History, Regina, Saskatchewan**. Please indicate the number of cards required. The 1962 contributors will receive cards automatically.

CONTRIBUTORS: W. Anaka, F. Brazier, D. Buckle, H. H. Burns, J. D. Chandler, H. Copland, E. S. Curtiss, R. Derketch, Mrs. E. A. Dodd, E. and R. Fox, D. Hatch, H. Hedger, H. V. Hosford, S. Houston, R. Klimack, E. Kuyt, J. Lane, L. Lohr, Mamie McCowan, A. C. Morgan, Barbara Robinson, G. J. Smith, E. J. White, Florence White, Mrs. F. Wilson, S. and R. Zazelenchuk.

SPECIES RECORDED: Common Loon (1), Red-throated Loon (1), Horned Grebe (3), Eared Grebe (1), White Pelican (1: colony of 35), Double-crested Cormorant (3: col. 40), Great Blue Heron (1), Canada Goose (3), White-fronted Goose (3), Mallard (32), Gadwall (1), Pintail (13), Green-winged Teal (2), Blue-winged Teal (10), American Widgeon (4), Shoveler (1), Redhead (4), Canvasback (3), Greater Scaup (1), Common Goldeneye (1), Oldsquaw (2), White-winged Scoter (3), Cooper's Hawk (2), Red-tailed Hawk (10), Broad-winged Hawk (2), Swainson's Hawk (5), Rough-legged Hawk (1), Ferruginous Hawk (1), Golden Eagle (2), Marsh Hawk (1), Gyrfalcon (1), Prairie Falcon (1), Peregrine Falcon (2), Sparrow Hawk (1), Willow Ptarmigan

(2), Gray Partridge (1), Sandhill Crane (2), Sora (1), Yellow Rail (3), American Coot (4), Semipalmated Plover (2), Killdeer (11), Common Snipe (2), Long-billed Curlew (1), Spotted Sandpiper (2), Baird's Sandpiper (1), American Avocet (2: col. 14), Northern Phalarope (1), Herring Gull (3), Ring-billed Gull (1: col. 20), Mew Gull (2), Bonaparte's Gull (1: col. 3), Common Tern (1), Arctic Tern (9: col. 5), Black Tern (9), Rock Dove (2: large col.), Mourning Dove (10), Black-billed Cuckoo (2), Great Horned Owl (14), Burrowing Owl (2), Long-eared Owl (5), Belted Kingfisher (1), Yellow-shafted Flicker (1), Pileated Woodpecker (1), Downy Woodpecker (3), Eastern Kingbird (9), Western Kingbird (8), Eastern Phoebe (16), Say's Phoebe (5), Least Flycatcher (2), Horned Lark (5), Tree Swallow (10), Bank Swallow (2), Barn Swallow (26), Cliff Swallow (8), Purple Martin (1: col. 42), Blue Jay (1), Black-billed Magpie (8), Common Crow (17), Dipper (1), House Wren (12), Long-billed Marsh Wren (1), Catbird (6), Brown

Thrasher (4), Robin (43), Hermit Thrush (1), Gray-cheeked Thrush (2), Veery (2), Mountain Bluebird (4), Townsend's Solitaire (1), Golden-crowned Kinglet (1), Water Pipit (1), Sprague's Pipit (4), Cedar Waxwing (4), Loggerhead Shrike (2), Starling (1), Red-eyed Vireo (2), Warbling Vireo (2), Yellow Warbler (4), MacGillivray's Warbler (1), Yellowthroat (1), House Sparrow (2), Bobolink (3), Western Meadowlark (8), Yellow-headed Blackbird (6), Red-winged Blackbird (22), Baltimore Oriole (2), Bullock's Oriole (1), Brewer's Blackbird (8), Common Grackle (3), Rose-breasted Grosbeak (3), Hoary Redpoll (5), Common Redpoll (5), American Goldfinch (2), Savannah Sparrow (3), Grasshopper Sparrow (1), Baird's Sparrow (1), Sharp-tailed Sparrow (1), Vesper Sparrow (15), Tree Sparrow (1), Chipping Sparrow (4), Clay-colored Sparrow (8), Harris' Sparrow (3), White-crowned Sparrow (1), Lincoln's Sparrow (1), Song Sparrow (5), McCown's Longspur (1), Lapland Longspur (5), Chestnut-collared Longspur (1).

Twenty-first Annual Saskatchewan Christmas Bird Count, 1962

Edited by **Margaret Belcher** and **Dorothy R. Wade**, Regina

A new record of total species counted was made this year with 68 species reported on count day from 26 localities. Observers recruited for the count numbered 135, with Saskatoon placing the largest number in the field. Even with two guests from Indiana, the Saskatoon total of 36 did not quite reach last year's record of 37 observers from that club.

The total number of species observed in Saskatchewan during 21 years of Christmas counts now stands at 108, the Regina group having added two new species—Ross' Goose and Shoveler.

Late migrants appeared more numerous than usual, presumably owing to the continuing mild weather. Mourning Dove, Brown Creeper, Western Meadowlark, three species of blackbirds and Common Grackle, Slate-colored Junco, Tree Sparrow and Song Sparrow were all reported in one or more localities. Short-eared Owls were more common than usual, reported from 10 points. Thirteen points reported Horned Larks, which were not only present in more localities but were noted frequently in flocks as though forming part of a last wave of migrants.

Gray Partridge were counted in 14 districts, with several compilers com-

menting on their numbers and the large size of the winter flocks.

In assembling these records during the absence of Mary and Stuart Houston, we have appreciated the assistance given by Lucy Murray and Douglas Wade.

BATTLEFORD, Sask. Dec. 31; 27 miles by car and 5 miles on foot in 4½ hours; temp. -20°; wind N. at 20 mph; 10 inches of snow. 14 species, 218 individuals. Ruffed Grouse, 1; Sharp-tailed Grouse, 1; Rock Dove, 17; Snowy Owl, 1; Hairy Woodpecker, 3; Downy Woodpecker, 2; Black-billed Magpie, 5; Black-capped Chickadee, 5; Bohemian Waxwing, 52; House Sparrow, 41; Evening Grosbeak, 18; Pine Grosbeak, 16; Common Redpoll, 19; Snow Bunting, 37.—**Spencer Sealy.**

BLADWORTH, Sask. Dec. 27; 4 hours in the field—1½ hours by team, 2½ hours by truck or on foot; temp. 10° to 13°; wind S.W. at 6-8 m.p.h.; clear; snow 6 to 8 inches, mostly in drifts. 8 species, 2195 individuals. Sharp-tailed Grouse, 15; Gray Partridge, 61; Great Horned Owl, 1; Short-eared Owl, 1; Horned Lark, 29; Black-billed Magpie, 10; House Sparrow, 78; Snow Bunting, 2000 ±. (Add: Golden Eagle, 2, Dec. 21, Dec. 31; Rock Dove, 8, Dec. 21;

Starling, 1, Dec. 22).—**Bill, Theresa and Lawrence Beckie.**

CARON, Sask. Dec. 30; 15 miles by car in 2 hours; temp. 10°; clear; wind light; snow covering sparse. 4 species, 72 individuals. Gray Partridge, 40; Short-eared Owl, 4; Black-billed Magpie, 8; House Sparrow, 20.—**Mr. and Mrs. Cy Knight.**

DILKE, Sask. Dec. 31; 46 miles by foot and car in 6 hours; temp. 0° to 8°; wind N.W. 10-35 m.p.h.; overcast; 3" drifted snow. 11 species, 320 individuals. Pigeon Hawk, 1; Gray Partridge, 18; Great Horned Owl, 1; Short-eared Owl, 1; Hairy Woodpecker, 1; Downy Woodpecker, 1; Horned Lark, 3; Black-billed Magpie, 16; Black-capped Chickadee, 4; Starling, 2; House Sparrow, 250. (Add: Bohemian Waxwing, 2, Dec. 22; Snow Bunting—very numerous most days of the period).—**J. B. Belcher** (compiler), **Margaret Belcher, Mr. and Mrs. S. R. Belcher, Janet McArton.**

FOXFORD, Sask. Jan. 1; 6 miles on foot in 3 hours; temp. -1°; wind E.S.E. at 6-8 m.p.h.; 8 inches of snow. 6 species, 32 individuals. Hairy Woodpecker, 1; Downy Woodpecker, 3; Black-billed Magpie, 2; Black-capped Chickadee, 2; House Sparrow, 16; Evening Grosbeak, 8. (Add: Common Raven, 1, Dec. 28; Snow Bunting, 20, Dec. 26).—**Tom Bird.**

HAWARDEN, Sask. Dec. 31; 20 miles by car and around the farm for 6 hours; temp. 10°; partly cloudy; 6 inches snow. 4 species, 227 individuals. Golden Eagle, 1; Gray Partridge, 12; Rock Dove, 14; House Sparrow, 200. (Add: Short-eared Owl, 1, Dec. 27; Horned Lark, 4, Dec. 24).—**Harold Kvinge.**

HIGH HILL-KLOGEI LAKE, Sask. Dec. 30; 6 hours on foot through 9 miles of heavy brush and lakes, and 6 miles by car past fields and poplar bluffs; temp. 5° to 10°; wind S.E. at 8-10 m.p.h.; cloudy with snow flurries. 12 species, 64 individuals. Great Horned Owl, 1; Hairy Woodpecker, 1; Downy Woodpecker, 1; Black-backed Three-toed Woodpecker, 1; Northern Three-toed Woodpecker, 1; Gray Jay, 3; Black-billed Magpie, 1; Common Raven, 3; Black-capped Chickadee, 12; Evening Grosbeak, 3; Common

Redpoll, 12; Snow Bunting, 25.—**Anton and Steve Waychesen.**

KINDERSLEY, Sask. Jan. 1; 41 miles by car and 3 miles on foot in 4 hours; temp. 13°; light intermittent snow; 2 inches snow. 11 species, 831 individuals. Prairie Falcon, 1; Gray Partridge, 8; Rock Dove, 20; Great Horned Owl, 1; Short-eared Owl, 3; Horned Lark, 3; Black-billed Magpie, 2; Bohemian Waxwing, 27; Starling, 1; House Sparrow, 732; Snow Bunting, 33. (Add: Sharp-tailed Grouse, 2, Dec. 30; Snowy Owl, 5, Dec. 30).—**Glen A. Fox** (compiler), **R. A. and Kim Lamont.**

LADY LAKE, Sask. Dec. 23; 2 hours on foot; temp. 10°; clear and calm; 2 inches snow. 7 species, 48 individuals. Downy Woodpecker, 1; Gray Jay, 2; Blue Jay, 1; Black-capped Chickadee, 4; House Sparrow, 8; Pine Grosbeak, 2; Common Redpoll, 30. (add: Ruffed Grouse, 3, Jan. 1; Gray Partridge, 6, Dec. 29; Hairy Woodpecker, 1, Dec. 26; Black-billed Magpie, 1, Jan. 1; Common Raven, 1, Jan. 1).—**Donald J. Buckle.**

LEADER, Sask. Dec.; 3 hours afield around farmyard and on a 2-mile walk; temp. 10°; clear and calm; 1½ inch snow. 4 species, 76 individuals. Ring-necked Pheasant, 5; Downy Woodpecker, 1; Black-billed Magpie, 10; House Sparrow, 60. (Add: Bohemian Waxwing, 5, Dec. 28).—**Daisy D. Myers.**

ESTEVAN, Sask. Dec. 27; 12 miles by foot and 30 by car in 8 hours; temp. 15°; wind S.E. at 15 m.p.h.; 4 inches snow on ground; light snow in a.m., clearing in p.m. 23 species, 778 individuals. Mallard, 220; Pintail, 2; Common Goldeneye, 2; Common Merganser, 3; Sharp-tailed Grouse, 2; Ring-necked Pheasant, 1; Rock Dove, 16; Great Horned Owl, 1; Hairy Woodpecker, 1; Horned Lark, 4; Black-billed Magpie, 11; Black-capped Chickadee, 6; White-breasted Nuthatch, 1; Golden-crowned Kinglet, 11; Bohemian Waxwing, 32; Starling, 10; House Sparrow, 308; Red-winged Blackbird, 30; Rusty Blackbird, 30; Purple Finch, 2; White-winged Crossbill, 10; Tree Sparrow, 4; Snow Bunting, 95. (Add: Red-breasted Nuthatch, 7, Dec. 19).—**Darrel Carlson, Ross Lein** (compiler).

FORT QU'APPELLE, Sask. Dec. 26; temp. 4°; wind light; cloudy; 3 inches snow. 15 species, 189 individuals (summary of reports from individual observers). Ruffed Grouse, 1; Sharp-tailed Grouse, 2; Rock Dove, 15; Mourning Dove, 1; Great Horned Owl, 1; Downy Woodpecker, 2; Horned Lark, 1; Black-billed Magpie, 26; Black-capped Chickadee, 7; Bohemian Waxwing, 1; House Sparrow, 67; Red-winged Blackbird, 3; Rusty Blackbird, 6; Common Redpoll, 6; Snow Bunting, 50. (Add: Eagle, probably Golden but could be immature Bald, 1, Dec. 29; Snowy Owl, 1, Dec. 20; Hairy Woodpecker, 4, several dates and observers; Blue Jay, 3, several dates and observers; Northern Shrike, 1, on three dates by one observer; Western Meadowlark, 1, Dec. 30; Pine Grosbeak, 24, several dates and three observers).—**Nancy Bushell, E. M. Callin** (compiler), **Richard Carter, Errol Cochrane, Peter Flett, Mr. and Mrs. William Gray, Dr. H. D. Jenner, Richard Nevard, Horace Reed, S. Regan, Jos. Rumancik.**

McLEAN, Sask. Jan. 1; birds observed in yard. 6 species, 41 individuals. Great Horned Owl, 1; Hairy Woodpecker, 2; Downy Woodpecker, 2; Black-capped Chickadee, 12; Robin, 1; Bohemian Waxwing, 23. (Add: Ruffed Grouse, 4).—**Mrs. Hilda Newton, Mrs. Harold Bray.**

MASEFIELD, Sask. Dec. 27; 6 miles by car over open country, 5 miles on foot on the Frenchman River; temp. 30°; calm and bright, but clouding over. 15 species, 394 individuals. Marsh Hawk, 1; Sage Grouse, 11; Ring-necked Pheasant, 5; Short-eared Owl, 1; Horned Lark, 5; Black-billed Magpie, 20; Black-capped Chickadee, 3; Starling, 1; House Sparrow, 300; Western Meadowlark, 1; Red-winged Blackbird, 4; Brewer's (?) Blackbird, 1; Pine Grosbeak, 20; Tree Sparrow, 20; Snow Bunting, 1. (Add: Golden Eagle, 2; Prairie Falcon, 1; Pigeon Hawk, 1; Gray Partridge, 9; Snowy Owl, 1, seen Dec. 20 by Bernard Reader; Long-eared Owl, 3, Dec. 23; Northern Shrike, 1, Dec. 29).—**J. David Chandler.**

MOOSE JAW, Sask. Dec. 26; 20 party miles by car and 21 by foot in 13 party hours; temp. 11° to 6°; wind N.N.W. at 29 m.p.h. gusting to 38 with blowing snow till noon; partially

cloudy; 3 inches snow on ground. 19 species, 1235 individuals. Ring-necked Pheasant, 24; Gray Partridge, 12; Rock Dove, 144; Great Horned Owl, 4; Snowy Owl, 1; Short-eared Owl, 1; Yellow-shafted Flicker, 1; Downy Woodpecker, 2; Horned Lark, 6; Black-billed Magpie, 115; Common Crow, 5; Black-capped Chickadee, 28; White-breasted Nuthatch, 4; Starling, 7; House Sparrow, 650; Brewer's Blackbird, 2; Pine Grosbeak, 15; Common Redpoll, 10; Snow Bunting, 204. (Add: Pigeon Hawk, 1, Dec. 28; Bohemian Waxwing, 7, Dec. 25; Slate-colored Junco, 8, Dec. 28).—**Mr. and Mrs. Carl Ellis, Mary Jane Ellis, John Ellis and Jack Zess** (compilers), **Mr. and Mrs. Cy Knight, W. W. Riome, Mrs. C. V. Stokins, Robert Tabaka, Mrs. F. B. Taylor, Hazel Winn** (members of Moose Jaw Natural History Society).

PELLY, Sask. Dec. 22; 4 hours by car, one hour on foot; temp. -5°; wind N.W. at 10-20 m.p.h.; cloudy with sunny intervals and blowing snow; 3 inches fresh snow. 9 species, 194 individuals. Downy Woodpecker, 1; Blue Jay, 2; Black-billed Magpie, 5; Black-capped Chickadee, 3; House Sparrow, 76; Evening Grosbeak, 1; Pine Grosbeak, 10; Common Redpoll, 5; Snow Bunting, 91. (Add: Goshawk, 1, Dec. 26; Sharp-tailed Grouse, 25, Dec. 26; Horned Owl, 1, Dec. 23; Hairy Woodpecker, 8, Dec. 26).—**R. and S. Zazelenchuk.**

PRINCE ALBERT, Sask. Jan. 2; mixed wood forest, black spruce bog, pine forest. 11 species, 186 individuals. Downy Woodpecker, 2; Black-billed Magpie, 1; Common Raven, 16; Black-capped Chickadee, 6; Boreal Chickadee, 1; Red-breasted Nuthatch, 1; Brown Creeper, 1; Bohemian Waxwing, 120; Evening Grosbeak, 31; Pine Grosbeak, 5; Common Redpoll, 2. (ED. NOTE: This count was made on Jan. 2, one day later than the official count period.)—**Donald Karasiuk.**

REGINA, Sask. Dec. 30; 259 party miles by car and 44 party miles by foot in 147 party hours; temp. -3° to 12°; wind S.E. at 20 m.p.h.; cloudy, with blowing snow. 34 species, 5306 individuals. Eared Grebe, 2; Mute Swan, 8; Whistling Swan, 4 (one crippled); Canada Goose, 237; Ross' Goose, 1; Mallard, 502; Blue-winged

Teal, 2 (one crippled); Shoveler, 1; Lesser Scaup, 10; Common Goldeneye, 1; Ruddy Duck, 7; Golden Eagle, 1; Sharp-tailed Grouse, 11; Ring-necked Pheasant, 18; Gray Partridge, 94; American Coot, 9; Rock Dove, 41; Great Horned Owl, 6; Snowy Owl, 3; Short-eared Owl, 3; Downy Woodpecker, 4; Horned Lark, 17; Black-billed Magpie, 63; Common Crow, 1; Black-capped Chickadee, 15; Brown Creeper, 2; Bohemian Waxwing, 8; Northern Shrike, 1; Starling, 21; House Sparrow, 3305; Pine Grosbeak, 3; Common Redpoll, 2; White-winged Crossbill, 13; Snow Bunting, 890. (Add: Pintail (injured), 1, Dec. 19, 23; American Widgeon, 1, Dec. 19; Canvasback, 1, Dec. 23; Prairie Falcon, 1, Dec. 19; Pigeon Hawk, 1, Dec. 28; Ruffed Grouse, 6, Jan. 1; Golden-crowned Kinglet, 1, Dec. 23; Rusty Blackbird, 1, Dec. 21).—**Ron Austin, Margaret Belcher, Frank Brazier** (compiler), **Betty Cruickshank, Adam Deutscher, Joyce Deutscher, Elmer Fox, Reg Fox, Doug Gilroy, Sylvia Harrison, Bernie Haysom, Ray Knudsen, Fern Lawrence, George Ledingham, Lorraine MacPherson, Robert Nero, Richard Robinson, Allan Smith, Herb Tempel, Ruth Tempel, Alan Wade, Dorothy Wade, Doug Wade, Vic Wilshire** (Regina Natural History Society).

ROUND LAKE (six miles north of High Hill, Sask.). Dec. 28; 7 hours on foot through 10 miles of deciduous woods mixed with spruce; temp. 5°; wind N.W. at 10-15 m.p.h.; cloudy with snow flurries. 10 species, 78 individuals. Ruffed Grouse, 3; Sharp-tailed Grouse, 1; Hairy Woodpecker, 1; Downy Woodpecker, 1; Common Raven, 2; Black-capped Chickadee, 1; Boreal Chickadee, 1; House Sparrow, 6; Evening Grosbeak, 2; Common Redpoll, 60 (est.). (Add: Pileated Woodpecker, 1, Dec. 21).—**Steve Waycheshen**.

SASKATOON, Sask. (All points within 15-mile diameter circle, including city, banks of South Saskatchewan River, airport, Forest Experimental Research Station; woodland 5%, mixed farming and pasture 90%, city 5%). Dec. 26; 8:30 a.m. to 4:30 p.m.; temp. 4° to 9°; wind N. at 22 to W.N.W. at 7 m.p.h.; 5 inches snow, drifts to 2 feet. Total party hours, 26 (8½ on foot, 17½ by car); total

party miles, 219 (21 on foot, 198 by car). 23 species, 4348 individuals. Mallard, 3; Lesser Scaup, 3; Common Goldeneye, 1; Sharp-tailed Grouse, 30; Ring-necked Pheasant, 21; Gray Partridge, 44; Rock Dove, 256; Great Horned Owl, 2; Yellow-shafted Flicker, 2; Hairy Woodpecker, 2; Downy Woodpecker, 1; Blue Jay, 9; Black-billed Magpie, 127; Black-capped Chickadee, 16; Bohemian Waxwing, 409; Cedar Waxwing, 34; Starling, 4; House Sparrow, 2258; Common Grackle, 2; Pine Grosbeak, 123; Hoary Redpoll, 2; Common Redpoll, 163; Snow Bunting, 836. (Add: Pigeon Hawk, 1, Dec. 31; Snowy Owl, 1, Dec. 27; Horned Lark, 1, Jan. 1; Robin 1 Dec. 19-27).—**Harold Belcher, John Black, Pern Cordery, Dr. and Mrs. Ray Denson, Mr. and Mrs. J. C. Finney** (Anderson, Indiana), **Bob Folker, George Gerrity, Ross Gerrity, Mr. and Mrs. Verne Gimbel, Ivan Gimbel, Sherry Gimbel, Mr. and Mrs. Bernard Gollop, Gladys Hall, Jim Hamilton, Mr. and Mrs. Jim Hogg, Connie King, Janet McDougall, Greg Michalenko, Bob Mills, Shirley Orr, Bob Pravda, Frank Roy** (compiler), **John Shadick, Dorothy Slater, Jim Slimmon, Mr. and Mrs. Ron Watts, Ted Wedge, Terry Wedge, Jim Wedgwood, Wendy Wood** (members and friends of Saskatoon Natural History Society).

SHAUNAVON, Sask. Dec. 22; 4½ miles on foot along the White Mud River and 65 miles by car; temp. 0°; cloudy; 1 inch snow. 10 species, 671 individuals. Golden Eagle, 1; Peregrine Falcon, 1; Sharp-tailed Grouse, 25; Ring-necked Pheasant, 11; Gray Partridge, 11; Horned Lark, 36; Black-billed Magpie, 113; Starling, 22; House Sparrow, 346; Common Redpoll, 85.—**Doug Young**.

SKULL CREEK, Sask. Jan. 4, 1963; 3 hours; temp. 46° to 38°; 11 species, 139 individuals. Common Merganser, 6; Golden Eagle, 1; Prairie Falcon, 1; Ruffed Grouse, 6; Sharp-tailed Grouse, 5; Ring-necked Pheasant, 11; Gray Partridge, 40; Saw-whet Owl, 2; Downy Woodpecker, 8; Horned Lark, 37; Bohemian Waxwing, 20. (Add: Green-winged Teal, 1, Dec. 20; Sharp-shinned Hawk, 1, Jan. 2; Rough-legged Hawk, 1, Dec. 27; Sage Grouse, 2, Dec. 18; Snowy Owl, 1, Jan. 2; Short-eared Owl, 1, Dec.

27, Jan. 3; Hairy Woodpecker, 1, Dec. 26; Blue Jay, 1, Dec. 21; Northern Shrike, 1, Dec. 24.) [ED. NOTE: The Skull Creek count was made on Jan. 4, three days later than the official count period.]—**Henry, Doug and Mrs. Edith Borman, Carolyn Drever, Mrs. Betty Mann, Steve Mann (compiler), Mrs. Steve Mann, Joan and Fred Stevens, Peter, George and Donna Swain, Harry Williams.**

SPIRIT LAKE, Sask. Dec. 30; sand-hills, hay meadows, farmyards; 5 party hours and 5 party miles on foot; temp. -1° ; wind S.E. light; snow flurries. 13 species, 143 individuals. Ruffed Grouse, 1; Hairy Woodpecker, 6; Downy Woodpecker, 9; Blue Jay, 1; Black-billed Magpie, 2; Black-capped Chickadee, 60; White-breasted Nuthatch, 2; House Sparrow, 40; Evening Grosbeak, 9; Pine Grosbeak, 2; Common Redpoll, 5; Slate-colored Junco, 1; Snow Bunting, 5. (Add: Great Horned Owl, 1, Dec. 21; Horned Lark, 2, Dec. 28-Jan. 1; Bohemian Waxwing, 2, Dec. 21, Dec. 26, Dec. 31, Jan. 1).—**Bill Anaka, Joyce Gunn.**

TULLIS, Sask. Dec. 27; open prairie; 3 hours—6 miles by truck, otherwise on foot; temp. 17° ; clear, becoming

cloudy and colder; little snow. 4 species, 20 individuals. Sharp-tailed Grouse, 2; Black-billed Magpie, 5; House Sparrow, 11; Snow Bunting, 2. (Add: Snowy Owl, 1, Dec. 20; Common Redpoll, 2, Dec. 28).—**Mrs. E. C. Boon, Chris and Robert Boon.**

WOLSELEY, Sask. Dec. 30; 8 miles on horseback; temp. 8° ; wind 15 m.p.h.; mostly clear; 6 inches snow. 8 species, 144 individuals. Ruffed Grouse, 1; Hairy Woodpecker, 1; Downy Woodpecker, 1; Black-billed Magpie, 8; Black-capped Chickadee, 1; House Sparrow, 100; Common Redpoll, 31; Song Sparrow, 1. (Add: Hawk (large hawk unidentified), 1, Dec. 24; Sharp-tailed Grouse, 23, Dec. 21, 26; Gray Partridge, 10, Dec. 20; Great Horned Owl, 1, Dec. 24; Northern Shrike, 1, Dec. 20; Starling, 19, Dec. 21; Pine Grosbeak, 1, Dec. 26; Snow Bunting, 40, Dec. 19).—**Donald Hayward.**

WOODROW, Sask. Dec. 20. 7 species, 252 individuals. Ring-necked Pheasant, 14; Gray Partridge, 31; Snowy Owl, 1; Short-eared Owl, 1; Black-billed Magpie, 3; Starling, 2; House Sparrow, 200+.—**C. H. Shulver.**

First Manitoba Christmas Bird Count, 1962

Edited by **David Hatch**, Oak Lake, Manitoba

This summary covers the first province-wide Christmas Count to be conducted in Manitoba. Thirteen areas took part in the survey, with a co-operative group of seven parties in Winnipeg making the biggest count in the province, of 23 species.

The exceedingly mild fall and winter preceding Christmas day resulted in many species remaining in the area instead of migrating south. The Horned Larks seen at Oak Lake and Melita were unusual for this time of year, but like the Tree Sparrows at Oak Lake and Slate-colored Juncos at Winnipeg and Brandon, had been recorded more than once on counts in past three years. The five Mallards seen in Winnipeg and the 67 Common Goldeneyes from Point du Bois and Seven Sisters were the only waterfowl on the count. One Harris' Sparrow, one Song Sparrow, and two Marsh Hawks in Winnipeg were odd-

ities, as was the Sparrow Hawk at Brandon and the Mockingbird at Oak Lake. The count produced only five Snowy Owls. The Barred Owl reported from Point du Bois was an unconfirmed report. Woodpeckers were down sharply with only one Black-backed Three-toed Woodpecker, 26 Hairy Woodpeckers and 21 Downy Woodpeckers. Evening Grosbeaks, Pine Grosbeaks and Bohemian Waxwings were here in smaller number than in 1961. A total of 45 species was seen in the province during the count period. Dr. Lawrie B. Smith and Mr. Harold V. Hosforth kindly assisted in compiling the counts.

ASHERN, Man. Dec. 30; semi-open country with some black spruce and poplar; 2 miles on foot in one hour, 6 miles by car in $\frac{1}{2}$ hour (3 p.m. to 4:30 p.m.); temp. -10° to -5° ; clear; 10 inches snow. 7 species, 51 individuals. Ruffed Grouse, 1; Sharp-

tailed Grouse, 4; Downy Woodpecker, 1; Black-billed Magpie, 1; Common Raven, 5; Black-capped Chickadee, 7; White-winged Crossbill, 32.—**David Hatch, Lawrie B. Smith** (compiler).

BIRD'S HILL, Man. Dec. 26. 10 species, 71 individuals. Ruffed Grouse, 5; Great Horned Owl, 1; Hairy Woodpecker, 2; Blue Jay, 8; Black-capped Chickadee, 14; Evening Grosbeak, 17; Pine Grosbeak, 5; Common Redpoll, 7; White-winged Crossbill, 10; Snow Bunting, 2.—**David Mossop, Harold Mossop.**

BRANDON NORTH, Man. Dec. 26; 22 miles in 3 hours (1 p.m. to 4 p.m.); temp. 2° to 10°; wind N.E. at 10 m.p.h.; overcast. 6 species, 28 individuals. Hairy Woodpecker, 2; Downy Woodpecker, 3; Black-billed Magpie, 5; Black-capped Chickadee, 12; White-breasted Nuthatch, 5; Starling, 1. (Add: Sparrow Hawk, 1; Common Raven, 1; Northern Shrike, 1).—**D. Hart, J. Lane, R. K. Lane, A. Lenny, R. McPhail, M. Malyon, W. Miller, D. Plews, W. Pugh, B. Wong, D. Wong.**

BRANDON SOUTH, Man.. Dec. 30; area 13 miles south of Brandon; 3 p.m. to 5 p.m.; temp. 4° to 0°. 8 species, 49 individuals. Sharp-tailed Grouse, 2; Snowy Owl, 1; Hairy Woodpecker, 1; Downy Woodpecker, 2; Black-billed Magpie, 2; Evening Grosbeak, 25; Pine Grosbeak, 1; Common Redpoll, 15. (Add: Boreal Chickadee, 2; Red-breasted Nuthatch, 1; Slate-colored Junco, 1).—**M. Eamer, M. Gaudin, M. McCowan, Barbara Robinson** (compiler), **D. Robinson, J. Robinson.**

MARCHAND, Man. Dec. 29; 9 miles by car and 1/2 mile on foot from 2 p.m. to 3:30 p.m.; temp. -2° to 1°; wind N.W. at 15 m.p.h.; 6 inches snow. 5 species, 66 individuals. Ruffed Grouse, 2; Downy Woodpecker, 1; Gray Jay, 3; Common Raven, 6; Pine Grosbeak, 54.—**David Hatch.**

MELITA, Man. Dec. 28; 36 miles by car and 2 miles on foot from 1:15 p.m. to 4:30 p.m.; temp. 9° to 6°; wind N.W. at 15-20 m.p.h.; overcast; 5-6 inches snow. 8 species, 283 individuals. Sharp-tailed Grouse, 7; Ring-necked Pheasant, 1; Gray Partridge, 17; Snowy Owl, 1; Horned

Lark, 3; Black-billed Magpie, 14; Common Redpoll, 40; Snow Bunting, 200.—**Mr. and Mrs. David Braddell.**

OAK LAKE, Man. Dec. 26; 61 miles by car in 6 hours and 4 miles by foot in 3 hours, from 8:15 a.m. to 5:15 p.m.; temp. -4° to 7°; wind N. at 5-15 m.p.h.; light snow in a.m., clear in p.m.; 4 inches snow. 19 species, 1366 individuals. Golden Eagle, 1; Ruffed Grouse, 1; Sharp-tailed Grouse, 26; Snowy Owl, 1; Hairy Woodpecker, 1; Downy Woodpecker, 1; Horned Lark, 10; Blue Jay, 1; Black-billed Magpie, 29; Black-capped Chickadee, 10; Mockingbird, 1; Starling, 1; House Sparrow, 170; Evening Grosbeak, 11; Pine Grosbeak, 2; Hoary Redpoll, 14; Common Redpoll, 584; Tree Sparrow, 5; Snow Bunting, 497. (Add: Goshawk, 1, Dec. 25).—**David Hatch.**

POINT DU BOIS, Man. Dec. 26; 30 miles by car and 3 on foot, from 10 a.m. to 4:30 p.m.; temp. -3° to 4°. 10 species, 220 individuals. Common Goldeneye, 58; Barred Owl, 1; Downy Woodpecker, 1; Blue Jay, 6; Common Raven, 9; Black-capped Chickadee, 25; House Sparrow, 22; Pine Grosbeak, 8; Common Redpoll, 30; Snow Bunting, 60.—**Claude Anderson** (compiler), **John Comer.**

ST. AMBROISE, Man. Dec. 31; temp. 10°; wind S.E. at 20-30 m.p.h. 4 species, 125 individuals. Snowy Owl, 2; Black-capped Chickadee, 1; Common Redpoll, 9; Snow Bunting, 113.—**Doug Kyle, J. J. Mott,** (compiler).

SEVEN SISTERS, Man. Dec. 26; 15 miles by car and 2 on foot, from 11 a.m. to 4 p.m.; temp. -3° to 4°; overcast in a.m., clear in p.m.; 3 1/2 inches snow. 9 species, 53 individuals. Common Goldeneye, 9; Hairy Woodpecker, 6; Downy Woodpecker, 4; Blue Jay, 3; Common Raven, 3; Black-capped Chickadee, 8; White-breasted Nuthatch, 1; Evening Grosbeak, 18; Pine Grosbeak, 1.—**Harold C. Hosford** (compiler), **Warren Johnston.**

SOURIS, Man. Dec. 20; 6 miles by car and one mile on foot in 2 1/2 hours; temp. 20° to 30°; no wind; clear; very little snow. 6 species, 71 individuals. Hairy Woodpecker, 2; Downy Woodpecker, 1; Black-capped Chickadee, 6; White-breasted Nut-

hatch, 2; House Sparrow, 30; Snow Bunting, 30.—**F. Hitchcock, Mrs. F. A. Hollies** (compiler), **Mrs. B. Reed**.

WAWANESA, Man. Dec. 28; 15 miles by car and 5 miles on foot, from 9 a.m. to 5 p.m.; temp. 14° to 10°; wind N. at 20 m.p.h.; snowing; 2-3 inches snow on ground. 10 species, 54 individuals. Ruffed Grouse, 2; Blue Jay, 1; Black-billed Magpie, 1; Common Raven, 1; Black-capped Chickadee, 6; White-breasted Nuthatch, 2; Bohemian Waxwing, 24; House Sparrow, 5; Pine Grosbeak, 1; Common Redpoll, 11.—**Ed Robinson**.

WINNIPEG, Man. Dec. 23; city parks, cemeteries, dumps, airport, Assiniboine and Seine Rivers; all-day count—total party hours 23 (18½ on foot, 4½ by car), total party miles 100 (24 on foot, 76 by car); temp. -9° to 3°; wind N.W. at 15-20 m.p.h.; sunny in a.m., but cloudy in p.m.;

2 inches snow. 23 species, 2248 individuals. Mallard, 5; Marsh Hawk, 2; Ruffed Grouse, 1; Gray Partridge, 34; Screech Owl, 2; Great Horned Owl, 4; Snowy Owl, 1; Hairy Woodpecker, 12; Downy Woodpecker, 7; Black-backed Three-toed Woodpecker, 1; Blue Jay, 9; Black-billed Magpie, 4; Black-capped Chickadee, 47; White-breasted Nuthatch, 26; Brown Creeper, 1; Bohemian Waxwing, 44; Starling, 313; House Sparrow, 1578; Evening Grosbeak, 61; Common Redpoll, 1; Slate-colored Junco, 4; Song Sparrow, 1; Snow Bunting, 180. (Add: Prairie Falcon, 1; Hawk Owl, 1; Common Raven, 6; Robin, 4; White-winged Crossbill, 2; Harris' Sparrow, 1).—**R. D. Bird, H. Copland, H. V. Hosford, K. Johanneson, W. Johnston, W. D. Kyle, B. Liddle, M. MacNichol, D. Mossop, H. Mossop, V. Scott, Perry Silverman, L. T. Simmons, G. Smith, L. B. Smith** (compiler), **R. W. Sutton**.

CO-OPERATIVE SPRING MIGRATION STUDY

Records are again requested for the continent-wide survey of spring migration being made under the auspices of the U.S. Fish and Wildlife Service. Please write to Mrs. Wade for forms listing the species for which reports are required, and then submit your records by June 15, 1963, to her at the following address:

Mrs. Dorothy Wade
1351 Jubilee Ave., Regina

INFORMATION WANTED

The request I placed in the last issue brought good response. These reports and others indicate a large influx of Snowy Owls this year. Therefore, I would like to repeat my request for sightings and include a further request for any sightings back to and including the winter of 1950-51. Please send to:

B. C. Haysom
750 Cameron St., Regina,
Sask.

SUPPORT THE S. N. H. S.

Attend the
SUMMER MEETING — JUNE 14-16, 1963
in the beautiful
CYPRESS HILLS PROVINCIAL PARK

Cabin reservations should be made immediately (see page 44).

Drummond's Milk Vetch



Photo by the late Dr. W. C. McCalla

Astragalus drummondii Dougl.

Drummond's Milk Vetch is a handsome species found growing on dry exposed hillsides and prairies in southwestern Saskatchewan and in Alberta. The stems grow in clumps and may be about two feet tall. The leaves are conspicuously white woolly. The flowers are a yellowish white and sometimes the keels are tinged with purple.

The Dry Prairies

by Keith F. Best, Swift Current

In our present series, we have moved from the dunelands through the sandhills to the dry hillsides. Now let us look at some of the plants found in the drier portions of the open prairie and on the eroded areas. As much of this area is only used by the rancher, we might first study two plants of some economic importance to livestock men.

Winter-fat (*Eurotia lanata*), often called White Sage, Winter Sage or Feather Sage, is not a true sage, but belongs to the Goosefoot family. The generic name *Eurotia* is from the Greek *euros* (mold) referring to the white hairy herbage. The specific name *lanata*, from the Latin *lana* (wool or hair), also alludes to the dense, woolly hairs that cover the plant.

Winter-fat is a perennial half-shrub or herb from six to 18 inches in

height. It has fine, star-like, white hairs which becomes rusty as the plant matures. The leaves are narrow, one-half to two inches long, and have rolled margins. Male and female flowers are borne separately on the same plant, with the male clusters above. The female flowers and fruit are enclosed in two bracts and have two horns at the top. The entire female inflorescence is covered with long, white, silky hairs making the plant very conspicuous in the fall.

Widely distributed over the dry prairie and on heavy lands, it extends to Texas and is commonly the dominant and most conspicuous plant on vast areas of winter range. It grows in distinct patches from several feet to thousands of acres in area, and with its deep tap root and numerous extensive lateral roots is remarkably resistant to drought.



Fig. 1. Winter-fat



Fig. 2. Nuttall's Atriplex

Grazed by all classes of livestock, it is very high in crude protein. Stock grazed on lands where Winter-fat grows thrive well and are said to be remarkably free of disease because of the tonic properties of this plant. It is a prolific seeder and is easily grown under cultivation, especially if the seed is covered by raking or harrowing. Although it grows well under conditions of controlled grazing, it may be completely destroyed by overgrazing and is often replaced by Rabbitbrush.

Nuttall's Atriplex (*Atriplex nuttallii*) is one of the saltbush species

in the Goosefoot family, and is found on badlands, eroded soils and alkali flats throughout the southwest. It is a low, leafy shrub, with a very deep rooting system. Generally growing almost prostrate, it may branch up to 2½ feet in height. The stem and leaves are pale green, with a fine scurfiness. Leaves are ¾ to two inches long, from linear-oblong to spatulate or ovate. Male and female flowers are on separate plants. Few plants are more alkali tolerant than this species and it is readily eaten by livestock, being highly rated for its mineral content and palatability.

UNUSUAL BLACK-EYED SUSAN

by A. J. Hruska, Gerald, Sask.

In September, 1962, I was informed of an unusual Black-eyed Susan, *Rudbeckia hirta* L., growing in our district in a location soon to be torn up by bulldozers. I checked the plant, dug it up and planted it in the garden for further observation next year.

Britton and Brown in their **Illustrated flora of the Northern States and Canada** (1952), say that this species is sparingly branched and that the rays are rarely darker at the base. Gray's **Manual of Botany** (Fernald, 1950) states that this plant is single-stemmed or branched near the base. The plant we found, with two flowers, the second inflorescence branching off about one-third of the way up the main stem, seems thus to be an unusual aberrant. As seen in the sketch, both the flowers had the same extensive and dark pigmentation on the basal part of their petals which covered about one-third of the petal. We had never seen this branching or such extensive and dark petal coloring.



LATE FALL FLOWERING OF SUMMER SPECIES

by Bill Richards, Saskatoon

Moisture conditions and the late, open fall of 1962 prompted some of our local flora to resume blooming. The **Saskatoon Star-Phoenix** carried several reports of crocuses in bloom and even lilacs in the city got the urge to put on a full show. There have been many local reports of pussy willows. On October 2, 1962, in a dry pasture bordering Eagle Creek (a few miles east of Kinley) I found several Moss Phlox in bloom as well as one Western Wall-flower. About a week later in the river bank area north of Beaver Creek (up river from Saskatoon) I found a beautiful Harebell in flower. Dandelions in the railway yard were still blooming up to the snow fall in mid-November.

S.N.H.S. RESEARCH GRANTS FUND

A small fund has been established to assist students and amateur members of the Society to do research in Saskatchewan. Awards up to a maximum of \$100.00 will be available each year. This money may be divided, and awards made to one or more persons. Persons interested should write immediately for an application form; applications must be submitted by May 1. Awards will be announced at the June meeting.

To qualify for assistance you must be a member of the Society, making observations in Saskatchewan. Assistance may be given for travel, maintenance, films or other equipment used in conjunction with a project. Sample projects — (1) collecting, mounting and classifying plants; (2) observations of a species of bird or family of birds to determine feeding habits, incubation periods, nesting habits, etc.; (3) collecting and preparing small mammals; (4) collecting, preparing and classifying butterflies or moths. The project must contribute to our knowledge of natural history.

The successful applicant will write up his study and submit it to be considered for publication in the **Blue Jay**. Only work not previously published is acceptable.

Write for application forms to S.N.H.S. Research Grants Fund, c/o E. L. Fox, 3455 Rae St., Regina, Sask.

GRASSHOPPER EGGS LAID IN SWEET CLOVER STEMS

by **Cliff Matthews**, Saskatoon

In 1961 we received some sweet clover stems with eggs of some insect laid right in the stem. That winter we incubated these eggs; only one hatched and the hatchling lived only four days. However, we were able to identify it as the nymph of the grasshopper *Pseudopomola brachyptera*.

We were astonished that this insect should turn out to be a grasshopper as this is (so far as we know) the first known instance of a grasshopper with this habit. The ovipositor of a grasshopper is not adapted to boring into woody stems and if the eggs were laid in the broken or cut end of the stem what kind of acrobatics the grasshopper must have had to go through!

These eggs were found by Mr. Alex Vadelboncoeur at Val Marie, Saskatchewan, along the railroad right of way. The sweet clover had been cut, but we don't know if the eggs were laid in the cut part of the stem or that left standing. The only other Canadian record of *Pseudopomola brachyptera* is from Onefour, Alberta—we have four in the station collection from this location.

If any **Blue Jay** readers notice what might be grasshopper eggs laid in sweet clover or other woody stems, it would be appreciated if these eggs were sent to us so that we could again attempt to hatch them. Please send to me or

Roy Pickford,
Canada Dept. of Agriculture,
Research Station, University Sub P.O.
Saskatoon, Sask.

"VELVET ANTS"

by **John V. Hodges**, Regina

Ants have become familiar companions for those of us who have been conducting archaeological investigations during the last nine years at the site we refer to as EdNh-1. Imagine our surprise, then, when what appeared to be a new species of ant walked across the area being trowelled one day last summer. This insect, which none of us had seen be-

fore, was identified as a "velvet ant", which is not an ant at all, but a wasp. This specimen was collected and brought to our home for further observation, then sent to the Research Branch of the Central Experimental Farm, Ottawa, for positive identification. Dr. W. R. M. Mason identified it as *Dasymutilla bioculata* (Cress.), a northern species of wasp.

These wasps are called velvet ants because the female is wingless and ant-like in appearance. The body is covered with fine, colorful, glossy hair. The writer allowed the insect to crawl around on his hands but this is not recommended. The insect is a true wasp, equipped to sting, and its sting is very painful. This applies only to the female, for the much smaller, winged male does not bite.

In order to photograph the wasp it was refrigerated to slow down its movements. It recovered quickly, but when it was restrained a squeaking sound was heard to come from its abdomen. The sound seemed to result from the insect moving its abdomen in a vertical plane causing the second last segment to be rubbed over the last segment. The piping sound was clearly audible and was successfully recorded on tape by Bernard Haysom. It was only heard if the insect was irritated and seemed related to its preparation to sting.

The stinger which protrudes from the rear upon attack is a very long needle-like device almost as long as the abdomen itself. It strikes very fast, so we were fortunate to get a colour photograph showing this rapier-like stinger fully extended.

The wasp had a bright red head, thorax and front abdomen. The rear half of the abdomen was black but a fine white line showed the location of the rear edge of the last two segments. It measured half an inch in length.

The female wasp must have been engaged in egg laying when one of our trowels uncovered her. She does this by following the burrow of some larval insect and then stinging it. She then lays an egg in the paralysed insect's body which will provide food for the developing young wasp. It was interesting to learn about this insect and its habits in the middle of our archaeological investigations.

Red Fox on the Increase ?



Sketch of red fox by Richard W. Sutton, Director, Manitoba Natural History Museum.

This little drawing, which was made several years ago, was recently submitted to the **Blue Jay** through the courtesy of Fred. G. Bard, Director, Saskatchewan Museum of Natural History. Mr. Bard has indicated to us that several reports of high numbers of red foxes have come to his attention. In the months of December, 1962, and January, 1963, at least 150 have been shot. At Rowatt, seven miles south of Regina, 26 were taken in and around the J. Baker farm. Another report comes from the vicinity of Avonlea where 50 were taken. A single silver fox was among the reds.

We feel, along with Mr. Bard, that there is a need for more comprehensive reports of the changing status of our wildlife species. We hope that responsible authorities will provide further information on the red fox, lynx (there have been casual reports of this northern species in the prairie region), and the much maligned bobcat. The latter species is still unfortunately not even afforded the protection of a game species. We wonder how much longer we should allow this interesting mammal to be classed, along with rats and house sparrows, as vermin?—ED. NOTE.

Cougars In Saskatchewan

by Tom White, Regina

Occasional records of the mountain lion or cougar in Saskatchewan have generally been believed to be of wanderers from the Rockies. How-

ever, evidence coming to light in recent years suggests to me that cougars may occur as residents within the province. This may seem unlikely to

many Saskatchewan residents; however, cougars were killed in the Cypress Hills in 1914, at Kindersley in 1939, and in the Pasqua Hills in 1948. In addition I have recently compiled over 100 reports of sightings of cougars, their tracks, or kills ascribed to this species over the last few years. Sight reports are not always valid evidence, for when an animal is seen in dim light or when moving at some distance, details are indistinct and animals may seem larger than they actually are. The lynx and bobcat have much in common with the cougar; the lynx, especially, has long legs which support its body relatively high above the ground, and its long legs when thrown out behind in running might be mistaken for a long tail. Wolves, coyotes, and feral dogs have long tails and at dusk may appear to have a colour similar to that of a cougar. On the other hand, cougars are nearly four times the weight of a lynx or a bobcat, and they have a very long tail and relatively small head—features which provide a distinct means of identification. I believe that a portion of the sightings which have come to my attention are correct. It is of special interest to note that the majority of the sightings have occurred where there is the best range and the most valid evidence for the existence of the cougar.

Suitable conditions for cougar range are found in two areas of the province. One is the Pasqua Hills, one of the wildest parts of the pro-

vince; between the Carrot and Red Deer rivers there are 4,000 square miles of heavy forest. In addition there is a vast forest area to the north and to the southeast in the Porcupine Hills and Riding Mountain. The hills abound in deer and other game and there are few people other than trappers and loggers. Mr. Joe Fournier, who traps in the Pasqua Hills, in addition to obtaining a cougar specimen which has been mounted and which is on display in the Saskatchewan Museum of Natural History, recently reports having seen three further sets of tracks and three cougar kills. North of Yorkton the RCMP recorded tracks which have been accepted as authentic. In addition to these eight pieces of evidence I have obtained records of more than 60 alleged sightings in the Pasqua Hills or adjacent areas. There have also been seven reports from an area in western Manitoba which is connected to the Pasqua Hills by forest.

Suitable cougar range is also found in southern Saskatchewan where there is a semi-arid area extending from the Cypress Hills east to Avonlea and Milestone with a connection to the South Saskatchewan River via the Great Sand Hills. This area is connected to the Rockies by the Milk River and to southern areas of badlands by Frenchman's Creek and other streams. To the south are the Bearpaw Mountains, only some 50 miles away. As already mentioned cougars were killed in the Cypress



Joe Fournier and his Pasqua Hills cougar.

Hills 20 or more years ago; in addition I now have records of over 30 recent sightings in this area.

In parts of the Maritimes the cougar was thought to be extinct since before the turn of the century, but it has been recently shown that a small breeding group still exists in that region. I think that it is possible that a similar condition exists in Saskatchewan. Cougars have probably always been comparatively rare in the province. This large cat is mainly nocturnal, shy, wary, and lives in different habitats. However, two essential conditions for cougar range are a plentiful supply of deer and a sparse human population. Their main food is deer, although they also eat small mammals. Occasionally they will kill cattle or foals when left unguarded, but in eastern Canada there is little evidence of this occurring and it would appear that when deer are plentiful cougars seldom attack domestic stock.

The considerable information on which this brief account of my study

is based has been obtained over a relatively short period of time and it appears that further records may be forthcoming. I intend to prepare a full account of our findings at a later date and presently am hoping to elicit more information. The writer would welcome any further evidence or sightings either past or present. It would particularly be appreciated if anyone with new information or recent sightings would contact me as soon as possible after the event so that as much evidence as possible may be gathered. This is the only way in which it will be possible to determine whether or not there is a resident population of the cougar in Saskatchewan. Correspondents should contact me directly at 1919 Scarth Street, Regina.

ED. NOTE: Bruce Wright's book—**The Ghost of North America** (1959. Vanguard Press, New York. 133 pp.)—should be read by everyone interested in conserving wildlife species. Wright's "Ghost" is the mountain lion or cougar, a relatively rare animal which ought to receive protection, at least as a game animal. We agree with Wright when he says: "DON'T SHOOT TO PROVE THERE IS ONE..."

ATTENTION ROCKHOUNDS

by **Watson Crossley**, Grandview,
Manitoba

Since the last issue of the **Blue Jay** with its item on rock tumblers and a news note from the Saskatoon lapidary and mineral club seven letters have come in encouraging us to continue with a rockhound section. Tom Bird suggests, however, that less scientific items be put in a newsletter and this may be a good idea. Since there is not enough space for items on our hobby in this issue, I will send out a mimeographed newsletter to all those requesting it.

In this letter I shall attempt to answer two of the questions most commonly asked me. First, what sort of equipment should one get for the cutting and polishing of rocks, and second, can one make some or all of the machine oneself?

If a person is really interested in making a start in cutting rocks I would certainly recommend that he subscribe to one of the lapidary magazines. Then a study of various kinds of equipment advertised can be made. The person should also visit someone who has equipment and

actually see the things that will be required by this hobby.

Generally I would recommend the purchase, rather than the making, of equipment, especially the saw, for this is a precision machine. Lap and polishing machines are not so difficult to make, however, and they may be made at home.

NOTICE TO SASKATCHEWAN ARCHAEOLOGISTS

A meeting of all interested people will be held in the Saskatchewan Museum of Natural History, Regina, on April 20, 1963, to form a Saskatchewan Archaeological Society. This will be an all-day meeting, and officers will be elected at that time.

The interim committee planning the meeting has already distributed a newsletter (February, 1963). If you are interested in receiving this letter, or in details of the programme for the April meeting, write Bruce McCorquodale at the Museum.

JUNIOR NATURALISTS

Edited by **Joyce Deutscher**, Saskatchewan Museum of Natural History



Brandon Bird Club. Mr. J. Lane and the Junior Birders with many of the bird houses which they constructed. (See Doug. Wong's report on the next page.) -

COMMENTS AND PRIZE WINNERS

We are pleased to report that the number of entries to the Junior Naturalist's section has increased and we are looking forward to an even greater number of letters from boys and girls this spring and summer. We would particularly like to thank Mrs. Doris Anderson and Mrs. Marjorie Russell for sending in entries from their schools as well as the boys and girls who sent in their observations. A special welcome goes out to the newcomers to our page.

We are pleased to have several regular contributors with us including Ralph Underwood with his excellent insect studies and Bohdan Pylyec with more of his bird observations. It was Bodhan who drew the Cedar Waxwing in the last issue of the **Blue Jay**.

It was finally decided to award the prize to Joe Michael who has done a fair amount of wondering about and investigation of some small forms of animal life which he found in a crack in the ice.

A prize will be awarded again next issue for the best entry.

RING-NECKED PHEASANT

by **Rachel Niniowski**, age 10,
Kamsack

On October 28, 1962, our family was driving on No. 8 highway between Wroxton and Churchbridge when we saw a pheasant cross the highway and walk into a patch of willow shrubs.

The land there is fairly level with lots of marshy sloughs. The trees are mostly poplar bluffs and willow shrubs.

We knew this bird was a Ring-necked Pheasant because of its size which was twice as big as a prairie chicken, its white ring on the neck, the beautiful metallic sheen of its purple head, the brown speckled body and its long tail feathers. This pheasant was much bigger than the pheasant we had seen in the Assiniboine Park Zoo at Winnipeg. Besides being larger it was also plumper and much neater in appearance.

I think wild birds look more attractive when observed in their wild state and in their natural surroundings.

GOLDEN EAGLE



NOTE: Norman Nelson, Boise, Idaho, sent us several drawings and tells us that he trains falcons and hawks to hunt; and his interest in wildlife originates from eight years of falconry. Drawing he picked up from practice. He continued that the Golden Eagle needs protection and felt his drawing might fit nicely into the Blue Jay.

MARVEL OF NATURE

by **Joe Michel**, age 14, Kendal

On a cold clear evening January 15, 1963, at about 5.30 p.m., with the temperature at about 20° below zero, my brother Carl led me to a clearing in the willow bush behind our house. There was a lot of ice caused by an underground spring, which broke the surface there. In the ice there was a crack which contained many small insects. Imagine my surprise to find insects swimming around in water at this temperature. I later found out (after much hunting through Encyclopedias and a Zoology handbook) that these insects are a type of water beetle resembling the water scavenger beetle. With these beetles there was another type of insect which I think are either the larvae of these beetles or a crustacean called the fairy shrimp. I collected about ten of each kind placing them in a jar of cool water.

In the nearby ice there were more of these insects, frozen solid.

When I got to the house, I put some parsley, chopped lettuce and cracker crumbs into the water. The beetles latched onto the food and appeared to be eating.

The larvae or fairy shrimps stay close to the bottom of the jar. Although they swim around a bit they are not nearly as active as the beetles which are diving and swimming constantly.

Our theory as to how these insects came to be in the ice is that the crack in the ice may extend to the underground spring where they live and breed. The pressure of the water could have forced them to the surface.

I would enjoy hearing from anyone who has seen or heard of a similar occurrence.

NEST BUILDING PROJECT REPORT

by **Doug Wong**, age 14, Brandon

During the 1961 season, our club under the able leadership of Mr. Lane, built and put up 121 bird nests as was reported in the **Blue Jay** for March, 1962.

This last winter our club doubled the number of nests built the previous year, building 250 nests. These were mostly built by adult birders. Some of these new nests were set out around the Brandon area by the Junior Birders last winter and spring. Mr. Lane would get together a group of boys and take us out for an enjoyable day, setting out the nests and bird watching as well. Two adult birders set out the balance of the nests, spreading them out from Campbell on the east to Broadview on the west. The results of the 1961-1962 bird-nest project were successful. The Tree Swallows occupied 21 nests, while Mountain Bluebirds nested in 15 nests. The Eastern Bluebirds raised their broods in four nests and the House Wrens claimed 11. Five nests were occupied by House Sparrows. Twenty-two nests were left vacant, while 75 were not checked. Unfortunately 22 were vandalized by humans, making a total count of 374 nests.



POLYPHEMUS OBSERVATIONS

by **Ralph Underwood**, age 16,
Strasbourg

On June 2, 1961, Dad caught a Polyphemus moth in Rowan's Ravine Park. This is a moth with a wing span of 5.5 inches. Its over all wing coloration is orangish brown becoming heavily flecked with black. Each wing has a transparent eye spot encircled with a yellow ring. In the lower wing the eye spots contain blue and are accented by a bold black border.

When Dad first saw it, it was being chased by a Killdeer and it took refuge on the tractor which Dad was running. Remembering that I was interested in insects, he brought it home and put it in a cardboard box. That night the moth laid 47 eggs in groups and individually on the walls of the box. They were white and rather like rounded squatty barrels. The moth died shortly after laying the eggs so I pinned her as a specimen.

Ten days later, on July 1, the eggs began hatching and by July 3, every egg had hatched. Before hatching the eggs would become quite dark colored. Then the larvae would eat a hole through the egg and crawl out. Many of the larvae ate the remaining egg shell.

The young caterpillars had large reddish brown heads and short slender yellowish white bodies which were sparsely covered with short silky hairs. Their average length was mm.

I transferred the larvae to a maple ranch, which I put in the box. Some of the larvae seemed to eat the tenderest leaves but others seemed prone to wander. I offered the larvae many other varieties of leaves, but they didn't seem satisfied.

Many of the larvae were dying. I don't know the reason for it although

it could be lack of right kind of leaves, or the leaves may have been too dry because of the dry year. Also the larvae may have been damaged as they hatched on the cardboard and had to be moved to the leaves. On July 5, because of the mortality rate, I released the remaining 13 larvae onto our trees.

A BEAVER ON LAND

by **Eileen Adair**, age 12, Maryfield

One night when my family was coming home from my uncle's we saw something very strange. About halfway home we saw something moving ahead. At first we thought it was a skunk or a porcupine but when we got closer it looked too big. At last we got close enough to see it. When we saw its broad flat tail we knew it was a beaver. It was walking right down the middle of the road so we couldn't get by it. At last Dad stopped the car because it was so slow and we weren't getting anywhere. Finally the beaver started to go to the edge of the road.

As we went past it I got a small glimpse of it. The beaver was quite fat and it was as big as a small collie dog. It had a very flat tail that looked quite strong. I could see the scales on it. After looking at it for a while we drove off. It wouldn't have been so strange to see a beaver on land but this one was at least two miles from water. This is one of the strangest things I have ever seen.

THE PET RABBIT

by **Murray Moore**, age 12,
Maryfield

One day I was out in the field stooking. It was about noon when I saw a rabbit run into a stook. I worked until noon then took the rabbit home with me. It was only a little bunny and was very fluffy. I put the little bunny in a box so that the cats wouldn't get to him and eat him and then I gave him leaves and grass to eat.

I kept feeding him for many days and one day I let him out. I left him out to play all day. At nightfall I put him back into his box forgetting to lock it. During the night the rabbit got out and by morning the tomcat had his fill of him. That was the end of my little rabbit.

A FASCINATING PET

by **Brenda Matte**, age 13, Maryfield

A few years ago a farmer found a fawn and brought it to my dad. The fawn was only about three days old when we got her. We named her Bambi. Because Bambi was so small and unafraid of anything we kept her in the house for the first few days. When we got a pen built for her she wouldn't stay in it, so we let her sleep in the house every night although she did play outside all day with the dogs. Duke, our big dog, was very protective towards Bambi. When feeding time came Bambi would walk over to the fridge and beg for her bottle. Her feeding times were three times a day and once at five o'clock in the morning. By the time Bambi was about two and one half weeks old she knew her way all over town.

When we raced on the lawn Bambi always won. She could run faster than me or the dogs. Bambi grew rapidly and soon she began to lose her spots. Hunting season was coming soon so we took Bambi to the zoo at Brandon. I think Bambi was one of the most fascinating pets I have ever had.

THREE JACKRABBITS

by **Stella Ronaghan**, age 7, Chauvin

North of the Battle River we saw three jackrabbits together at the edge of the road. We just about ran over one but it ran off the road. They ran in front of the car because the lights blinded them. They didn't know where they were running.

THE CHICKEN BREAKFAST

by **Dale Flynn**, age 12, Maryfield

One morning I awoke because there was a lot of noise outside. I looked out the window and saw a coyote after a rooster. The coyote chased the rooster up to the house and was about to grab it when I ran out and told the dog to get him. Tippy almost caught him but he got away.

MY PET GARTER SNAKES

by **Brian Evans**, age 11, Torch River

I always wanted a snake but I never could get one. Finally, one day last summer my parents came home from town and had a snake with them. My uncle had caught it and gave it to my parents to bring home to me. That night my dad and I made a pen for it but the next day it got away. Then my uncle got me about four or five of them and we fixed the pen better and they did not get away. I had one about two feet long and one about one and a half feet long and then a little one only six inches long. I like the one about two feet long the best. I called him Jo and taught him to go around my neck and stay there. Some people say that they are slimy but they are not. I fed them little bits of meat and kept water in their pen. They swam in it and drank some too. Later on I gave some away and two of them died because I left them outside and there was not enough sand for them to dig under. Just the little one lives and I've still got him. He is sleeping in a dark corner in the basement.

BIRDS AROUND THE HOUSE

by **Bodhan Pylypec**, age 12,
Yellow Creek

The chickadees are the most common bird to come to my feeding tray. About four or five come in the morning and evening. Only one feeds while the others wait. After eating some scraps they go to feed in the branches of trees. Sometimes when I'm at a distance the chickadee picking sounds like a woodpecker hammering. Once in a while a Downy Woodpecker pays a visit to the feeding tray. After some hammering he gets off in the trees.

The chokecherries attract the Ruffed Grouse. When they eat the swing sometimes almost upside down. They come early in the morning or late in the evening when it is quite dark. The birch cones attract the Tree Sparrows. They, too, like the Ruffed Grouse, swing on the branches but usually upside down.

Lately I've seen seven Bohemian Waxwings. They were flying around and searching for chokecherries. These are the first arrivals I've seen this winter.

The Blue Jay Bookshelf

WOLF WILLOW. By Wallace Stegner. 1962. Viking Press Inc., New York. \$5.95.

This book, as the subtitle states, is "a history, a story and a memory of the last plains frontier." It deals with the part of the Palliser Triangle lying just north of the Montana border as far north as the Cypress Hills and east to Shaunavon. The life of the Indians, the coming of the North West Mounted Police and the work of the Boundary Survey of 1872 are written with an expert hand. Mr. Stegner has done his research well, and this part of the book is a real contribution to Canadiana. One could wish that the book had ended here because the later chapters are depressing.

Mr. Stegner came into this country in 1914 as a boy of six. His people homesteaded near the Saskatchewan-Montana border, but in the winter the boy went to school in the raw new town of Eastend (which for some reason he calls Whitemud). By 1920 they were broke and went back to the United States. Mr. Stegner writes of his mother's decision to leave: "She knew nothing about minimal annual rainfall, distribution of precipitation, isohyetal lines. All she knew was that they were trapped and licked."

Wolf Willow is an epic indictment of the Homestead Act (itself an importation from south of the border) which cut through the findings of Palliser and others and lured the unwary into an area where topography, climate and soil all promised nothing but heartbreak for the farmer. It also exposes the gullibility, the lack of knowledge and lack of preparation of the first settlers to the area. As Mr. Webb in "The Great Plains" (Gunn and Company, 1931) explains, there is a "ranch" literature of the plains and a "farm" literature. He finds the latter full of sadness, drabness and disappointment; whereas the story of the ranchers vibrates with life and optimism. The happier tone of the ranchers' literature is due in no small part to the fact that they left nature alone and simply enjoyed their surroundings, merely putting the cattle in place of the buffalo. The farmer, trying to "tame" the land, killed the

wild things and turned the sod the wrong side up; he gradually destroyed his environment and had to pull out.

I came to the Cypress Hills country from England bringing with me a countryman's conservative point of view and a sense of pre-history, since my family had been linked to Canada since the time of Wolfe. I blame the failure of people like the Stegners to remain in the area partly on their mid-western European-American folk cultural approach which could not possibly evaluate the British-Canadian slow and steady way of life nor the culture that went with it. I feel that the American idea of progress, which in some cases is really exploitation, can be contrasted with the Canadian way which is to concentrate on building a nation and not on the personal pursuit of happiness.

Mr. Stegner gives the false impression that the ranching industry came to an end in the terrible winter of 1906 and 1907. The fact is that the shortgrass plains were, and are still, typical ranching areas. The fencing of the ranges and some incidental dry farming does not alter that. The story of that epic winter is taken from the diary of a young Englishman (the section is called "Genesis"). The character of the Wagon Boss (the author calls him a "foreman" which is farm talk) is well portrayed. The other cowboys are not so well described in my opinion. The author's comments are authentic in that these cowboys (mostly Americans!) did not understand the art of conversation and could only "josh". It is too bad, in a way, that Mr. Stegner could not, being a farm and town boy, concentrate on describing the freer life of the cowboy. Had he been a cowboy, a horse lover, had he been able to ride through the starlit night or bed in the grey sage, he would have found a world far removed from the town dump, the "complaisant little girls" (to be found everywhere), and the scorched homestead.

Mr. Stegner has made some errors. For example, the Hudson Bay Company to him was "just another catalogue"; this will be news to many! The new railway line to which he refers is actually the Weyburn-Leth-

bridge branch of the CPR, not a line from Moose Jaw; and the "stage coach" he rode from Gull Lake was in reality a mail democrat. He misses the real symbolism of the "ghost dance" which stressed non-resistance and penance.

Although my reaction to the book was a critical one for the reasons cited, I can still guarantee that the average reader will enjoy the book for its interesting story; Mr. Stegner shows a high degree of proficiency as a writer and historian. He will be pleased to know, incidentally, that Eastend now has plumbing — which, of course, has nothing to do with culture!—**R. D. Symons, Regina.**

COLLECTION AND CARE OF BOTANICAL SPECIMENS. By **D. B. O. Savile**, Plant Research Institute, Central Experimental Farm, Ottawa. Publication 1113, 1962. Queen's Printer, Ottawa. pp. xii+ 124. \$2.00.

This booklet is, as its title announces, a practical guide to field and laboratory techniques in botanical collecting. As noted by the author, most space is given to methods good for the higher or vascular plants. A longish section on fungi follows, then shorter treatments on mosses and liverworts, lichens and algae. This reviewer found the sections treating the fungi and other lower plants more interesting than those on higher plants. For these latter he had already worked out his own techniques, but the treatment of lower plants was all new information to him.

Among matters treated are the things one should observe and record in field notes, from obvious characters such as flower colour and tree height to recondite matters such as whether or not there is milky juice in a mushroom, and bits of information such as what is the best sort of hammer to use in collecting rock lichens. Likewise there is much on useful herbarium techniques and dodges. For one thing, the author comes out strongly in favour of artificial heat in drying specimens and gives plans for building a collapsible drier heated by electric light bulbs which strikes this reviewer as very neat. Similarly the suggested replacement of the gummed linen tape in mounting plants on cards by a quick-hardening liquid plastic dispensed from an oil can seems a time and

labour saver. There is one suggestion that some have found not such a good idea—that the dried specimen should be stuck to its final sheet with glue or other adhesive. As the late A. C. Budd remarked on the subject: "And what is likely to happen when your sheet bends slightly? Your specimen will break."

Considerable space is given to questions of cataloguing material in the large herbarium and of book-keeping procedures re: exchanges and loans between such institutions. These are matters of slight moment to the private person. Some comment on the organization and care of small herbaria might be useful to more people.

The main interests of the author must lie in alpine and Arctic collecting. Here under cool humid conditions large collections must be made in a minimum of time. Here is where his "field press" as described on pp. 10-15—a sort of brief-case-like holder for newsprint folders—would be of great utility for containing specimens between the times of gathering and pressing. Whether this field press would be as well adapted for work in hot, dry country where wilting of specimens is an ever-present danger is open to debate. The old style vasculum might be as good and new style polyethylene bags better.

There is an interesting treatment of the matter of clothing for field work; this is important in wooded or northern areas. Techniques for guarding against the man-eating insects of the north woods are also described.

The book is of convenient size—5"x8"—to fit an outside pocket. The water-resistant leatherette covering seems plainly an adaptation for the field.—**John H. Hudson, Saskatoon.**

THE EYE OF THE WIND. An autobiography by **Peter Scott**. 1961. Hodder and Stoughton, London, 679 p. 42 s.

A few days before he died in the Antarctic on March 29, 1912, Captain Scott wrote his wife, "Make the boy interested in natural history. It is better than games. They encourage it in some schools . . ." This was an influence that caused in Peter the evolution from wildfowler to con-

servationist, that led him to study zoology, architecture, and later, art at the Royal Academy, to set up a feeding station at Sutton Bridge and finally to help organize the Severn Wildfowl Trust on November 10, 1946, "for the scientific study and the conservation of wildfowl."

At Slimbridge where "the geese were in thousands" Peter Scott set up his new collection and research station, built a house with an 8 x 10 foot studio window, excavated a pool in front of it into which have been introduced "Ringed Teal from Brazil, Barrow's Goldeneyes from Iceland, Ne-ne Geese from Hawaii, White-

winged Wood Ducks from Siam . . . but many too are wild ones from faraway breeding grounds which have elected to spend their winter at the Wildfowl Trust on the Severn Estuary."

Here is Peter Scott's life story told by himself, with tales of his travels and his meetings with other naturalists, his experiences in broadcasting, and so on. Added to the 662 pages of the life story are the 50 photographs, the charming little pen and ink sketches that introduce each chapter and four "Peter Scotts" (full-page colour paintings). — **Tony Capusten**, Prince Albert.

NOTES AND LETTERS

PRAIRIE DOGS

My experience with Prairie Dogs is limited to Theodore Roosevelt Park. They had been nearly exterminated in that area before they were protected by the park. They increased rapidly under protection and cleaned the grass until only two weeds (*Dyssodia* and *Erigeron divaricatus*) remained. The areas were suitable for grazing and show only deterioration from the dogs. Vernon Bailey (1926. *Mammals of North Dakota*, N. Am. Fauna 49) says they eat grass and other plants and roots, and that in old towns the ground becomes so bare that they have to move farther out.

Prairie Dogs are certainly a good tourist attraction. We were impressed that they were much less acute than squirrels in finding food that was thrown to them.—**O. A. Stevens**, North Dakota State University, Fargo.

BADGER'S COLD STORAGE

Some time ago F. Chase had an item in the *Blue Jay* about badgers burying meat—in that case deer.

In late September, 1961, a small bear was shot and left in the bush near here. Shortly after a badger was seen in the area and upon investigation it was found that the 20-pound badger had moved that 100-pound bear some 20 feet where it was presumably easier digging. He had done a good job of mounding up his storage of bear meat. Don't think it did him any good though, for the badger

—I think it was the same badger since they are rare in this area—was shot raiding a neighbouring chicken house.—**Tom Bird**, Foxford.

FURTHER NOTES ON THE CROW'S SONG

At the summer meeting of the S.N.H.S. at the Cypress Hills park in 1957 the topic of crows singing came up. To my surprise what was common to me was new to some of the others and Frank Brazier asked me to write to the *Blue Jay* giving my description of the crow's song. Later in an item in the *Blue Jay* (Vol. 15:92) Mr. Brazier again asked for information. Since then I have thought about this many times and have brought up the matter of the crow's song to many people. I continue to be astonished at how unfamiliar it is to many. Being raised in the parkland with a dense crow population might have given me more opportunity to hear the song than many have had.

The crow's song is heard mostly in the spring, but occasionally in the fall. Usually there is a pair of birds, but sometimes the songster is alone. The performer bends over, hunches his back, the feathers on his neck stand up and he puts out one of the softest musical songs of the woods, quite in contrast to his normal voice. In words it is something like "ock-a-la-la", the first note sustained and the rest repeated rapidly in a lower note.—**Lloyd M. Lohr**, Erskine, Alberta.

ROCKHOUNDS

I have taught school for nine years, and am keenly interested in rocks. I would like to see more articles in the **Blue Jay** on rock collecting. I have found Mr. B. A. McCorquodale of the Saskatchewan Museum of Natural History most obliging in assisting me in the identification of rocks that I have collected. I have also purchased some one inch slabs of various unusual rocks from Smith's Prairie Rock Shop, 2222 Wallace Street, Regina. From the Janz Brothers, Souris, Manitoba, I have secured agate and jasper specimens. The **Lapidary Journal**, published in Del Mar, California, lists several Canadian addresses where stones uncommon on the prairies may be purchased.

There are many excellent books available to the person interested in rocks. The provincial library, 1150 Rose Street, Regina, has several books on the subject for loan. Among the books worth owning are: **A Field Guide to Rocks and Minerals** by Pough, price \$4.00; **Field Book of Common Rocks and Minerals** by F. B. Loomis, \$5.00; **How to know Minerals and Rocks** by P. M. Pearl, \$4.50; **Gems and Gemology** by R. Shipley, \$5.00; **A Guide to Geology**, Queen's Printer, Ottawa, \$1.00; and the more elementary book, **The First Book of Stones**, by M. B. Cormack, \$1.95. Trusting this information will help someone.—Mrs. R. A. W. Smith, Carievale.

In our new Saskatchewan Nature Science courses for public and junior high schools there is a description of rocks. Even in grade three they begin to learn the composition and main classes of our rocks. We older teachers, never had this knowledge or training and so are somewhat handicapped. Collecting stones is a "natural" for children. Learning what the stones are is the next step. Parents and interested persons can help, using the public school science texts for a beginning. Pamphlets from the University of Saskatchewan, Saskatoon, and the **Stamp Books** give more detail and better pictures and descriptions. The Golden Nature Guide paperback **Rocks and Minerals** is a good book for more mature rockhounds.

Saskatchewan rocks are varied and

one can find just about everything it seems to me. Egg cartons make good stone collection containers. One should be used for each type of stone. A card with the name and details can be pasted on the inside cover. If you happen to find a particularly nice rock it can be tumbled and polished and made a thing of beauty forever. We have only begun to see the magic on our own doorsteps.—Mrs. Irene A. Shaw, Kipling.

GREEN JAYS COURTSHIP

You would enjoy the different varieties of birds that we see here where we are holidaying in Texas—unfortunately we do not know enough about them to recognize all that we see or hear. Last spring when we were here we watched from our kitchen window a courtship exhibition of a pair of Green Jays. They are the most beautiful birds to watch, but I understand are the least desirable of the jay family.

The Santa Ana wildlife refuge is about 15 miles from here, and a short while ago several bus loads of Audubon Society birdwatchers came from New York to visit this refuge. It is a wild preserve supposed to have varieties that do not live anywhere else in the United States.—Mrs. Marney Robinson, Regina.

NOTES FROM OXBOW

Two items from our local paper in December, 1962, are of interest because of animals reported which are unusual in our area. The first reported a lynx shot on the Martin Keating Farm near Frobisher, Sask (and a second one has been shot there lately); the second noted that a lone antelope was seen in a stubble field southwest of Redvers.

We have not had many birds this winter, but there are thousands of snow buntings and still some horned larks with them (January 3). There are a few sharp-tails and quite a few gray partridge. A large horned owl was around for a while and one snowy owl was reported to me. The chickadees and downies have not come in from the bluffs, however, to use our feeder.—Mrs. Keith D. Paton, Oxbow.

IOWA CITY CHRISTMAS BIRD COUNT

Saskatchewan birders who are out in the field at Christmas counting the few species of birds that remain here through the winter are always envious of the larger number of birds that can be found on Christmas counts in other parts of the continent. So we print for your consideration the list from Iowa City, Iowa, which Mr. F. W. Kent kindly sent to us. Ten observers in four parties recorded the following species of birds in a 15-mile circle taking in Iowa City, Lake Macbride, Coralville Reservoir and country west: Sharp-shinned Hawk (1), Cooper's Hawk (1), Red-tailed Hawk (17), Red-shouldered Hawk (2), Rough-legged Hawk (4), Marsh Hawk (6), Sparrow Hawk (1), Bobwhite (18), Pheasant (13), Snipe (1),

Mourning Dove (4), Great Horned Owl (1), Barred Owl (3), Long-eared Owl (2), Short-eared Owl (6), Kingfisher (2), Flicker (12), Red-bellied Woodpecker (14), Red-headed Woodpecker (15), Hairy Woodpecker (8), Downy Woodpecker (26), Horned Lark (79), Blue Jay (26), Crow (28), Chickadee (65), Tufted Titmouse (16), White-breasted Nuthatch (23), Winter Wren (1), Mockingbird (1) (Mockingbird in yard since October), Robin (1), Golden-crowned Kinglet (1), Cedar Waxwing (8), Starling (15,000+), House Sparrow (2000+), Red-winged Blackbird (9), Brewer's Blackbird (400+), Grackle (1500+), Cowbird (600+), Cardinal (84), Purple Finch (1), Goldfinch (4), Junco (269), Tree Sparrow (745), White-crowned Sparrow (8), White-throated Sparrow (2), Song Sparrow (5), Lapland Longspur (4).

S.N.H.S SPECIAL PUBLICATIONS



No. 1

A Guide to Saskatchewan Mammals

by W. H. Beck, 1958 \$.50

No. 2

The Birds of the Sask.

River, by C. S. Houston and M. G. Street, 1959 \$1.50

No. 3

Birds of Regina, by

Margaret Belcher, 1961 \$1.00

No. 4

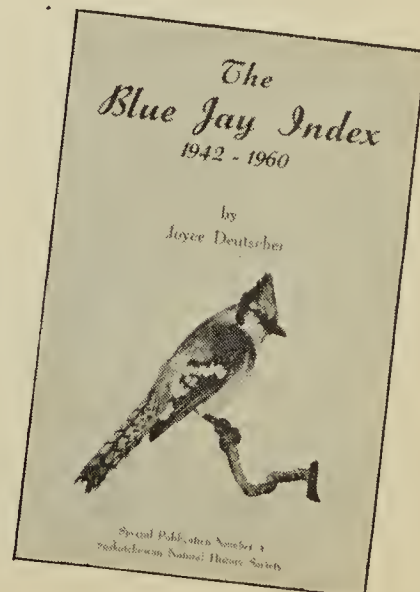
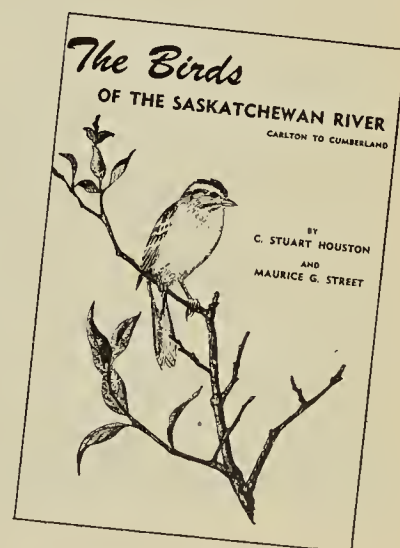
The Blue Jay Index, by

Joyce Deutscher, 1962 \$2.00

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Birds of Lake Athabasca
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Order from
S.N.H.S., Box 1121, Regina



Annual Summer Meeting

Cypress Hills Provincial Park, June 14-16



View from Bald Butte, Cypress Hills

Sask. Govt. Photo.

By popular request, the annual summer meeting of the Saskatchewan Natural History Society will be held again this year in the Cypress Hills. The program will begin officially Friday evening, June 14, with registration at 7:00 p.m. at **Park Headquarters** and business meeting and programme at 8:00.

Saturday, June 15, will be devoted to organized field trips, under the general co-ordination of the President, Steve Mann, who lives at nearby Skull Creek. Sunday morning trips—optional. Further particulars in the June issue of the **Blue Jay**.

ACCOMMODATION: Cabins (one or two-bedroom, modern and non-modern) at from \$4.00 to \$10.00. Roll-away cots available. Camp grounds. Meals served at headquarters.

Write as soon as possible for reservations to:
Commercial Manager,
Cypress Hills Provincial Park,
Maple Creek, Sask.

THE SASKATCHEWAN NATURAL HISTORY SOCIETY

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NOTICE TO MEMBERS

The Society appreciates the continuing support of its many members, and again urges everyone to take part in the Society's activities. We shall be looking forward to seeing many members at the June meeting, and we continue to look forward to your assistance in carrying out our educational and conservation projects. If you can find new members for the Society, or help put **Blue Jays** in school libraries, or encourage young people to send in contributions to the Junior Naturalists section, or make a contribution to the special funds mentioned in this issue by the Editor, you will be helping to keep ours an active Society.

MEMBERSHIPS

All persons interested in any aspect of nature are invited to join the Saskatchewan Natural History Society. Membership dues per calendar year are: Regular, \$2.00; Junior (including schools), \$1.00. The **Blue Jay** is sent without charge to all members not in arrears for dues. Send your membership to Frank Brazier, Treasurer, **Blue Jay**, Box 1121, Regina.

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White-tailed Jack Rabbit

Photo by L. A. Morgoten

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